المجلس التنفيذي
THE EXECUTIVE COUNCIL

دبي للتميز الحكومي
Dubai Government Excellence

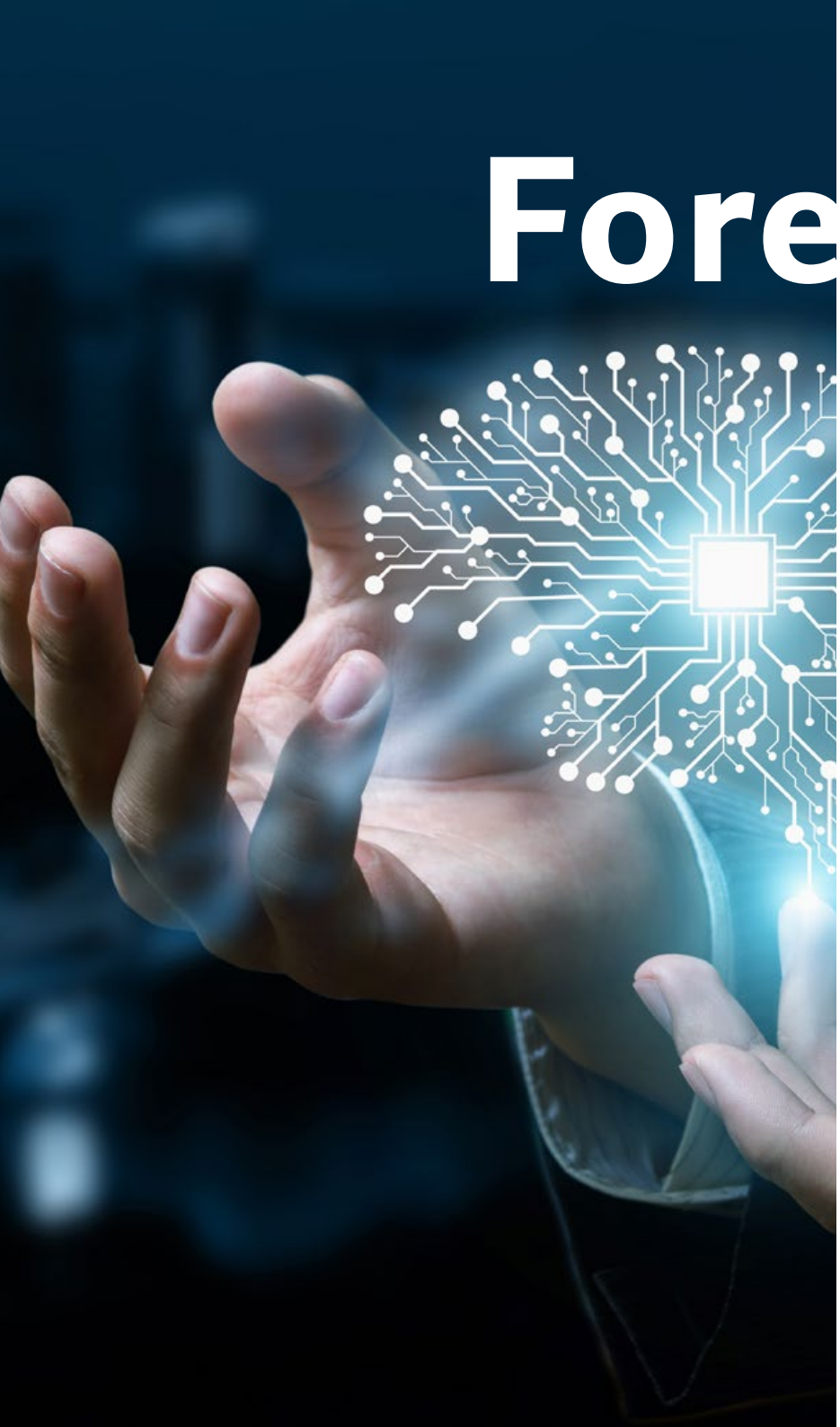
ACHIEVING PERFORMANCE EXCELLENCE THROUGH BENCHMARKING AND ORGANISATIONAL LEARNING

10 Case Studies from the 3rd Cycle of Dubai We Learn's Excellence Makers Program

www.DGEP.gov.ae

2021

This book is a joint publication by the Dubai Government Excellence Program (DGEP), United Arab Emirates, and its partner the Centre for Organisational Excellence Research (COER) Limited, New Zealand. This book aims to promote organisational learning and to share the best practices that resulted from 10 benchmarking projects. These projects were undertaken by the Dubai Government entities as part of the Dubai We Learn Initiative in 2019. The DGEP is a programme of the General Secretariat of the Executive Council of Dubai that reports to the Prime Minister of the United Arab Emirates. The DGEP works to raise the excellence of public sector organisations in Dubai.



Foreword

In February 2019, the Dubai Government Excellence Programme (DGEP) launched the 3rd Cycle of the 'Dubai We Learn' initiative. This initiative acts as a springboard for government entities to learn new skills and acquire new tools that support innovation, organisational learning, and a citizen-focussed approach to delivering government services. The Centre for Organisational Excellence Research (COER), New Zealand is DGEP's strategic and technical partner for delivering the initiative. This is the 3rd book published on the initiative, the first and second books summarised the 1st and 2nd Cycles respectively.

Dubai We Learn and the delivery of the Excellence Makers Program and provision of the Best Practice Imrovement Resource (www.bpir.com) runs on a one-year cycle offering the chance for project teams to be guided on how to find and implement best practices in areas of strategic priority. For 2019, 10 government entities participated with teams addressing a variety of challenges ranging from developing a user-friendly electric vehicle green charger to increasing the number of people that survive after a cardiac arrest. During the project year, the project teams all had opportunities to visit and learn from leading international organisations in locations as diverse as Spain, Netherlands, Singapore, USA, UK, and the UAE. They also had opportunities to share their progress with the other Dubai We Learn teams and at international conferences.

The success of the projects provides a solid foundation for continuous improvement across the whole of the Dubai government. In particular, the enthusiasm, learning and development exhibited by the team members provides confidence that they will serve as ambassadors of excellence for the future development of public service in Dubai.

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Chapter 1

The Dubai We Learn Initiative

We have learned

from His Highness Sheikh Mohammed bin Rashid that ensuring effective leadership is a national duty. We must all be qualified to work towards this objective by learning from international best practices and building on them to develop skills and capabilities that enable us to top global competitiveness indexes. The leadership is keen to support creative initiatives that boost the government's operational efficiency, which is key to the emirate's comprehensive development.

His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum
Crown Prince of Dubai - Chairman of The Executive Council, Dubai

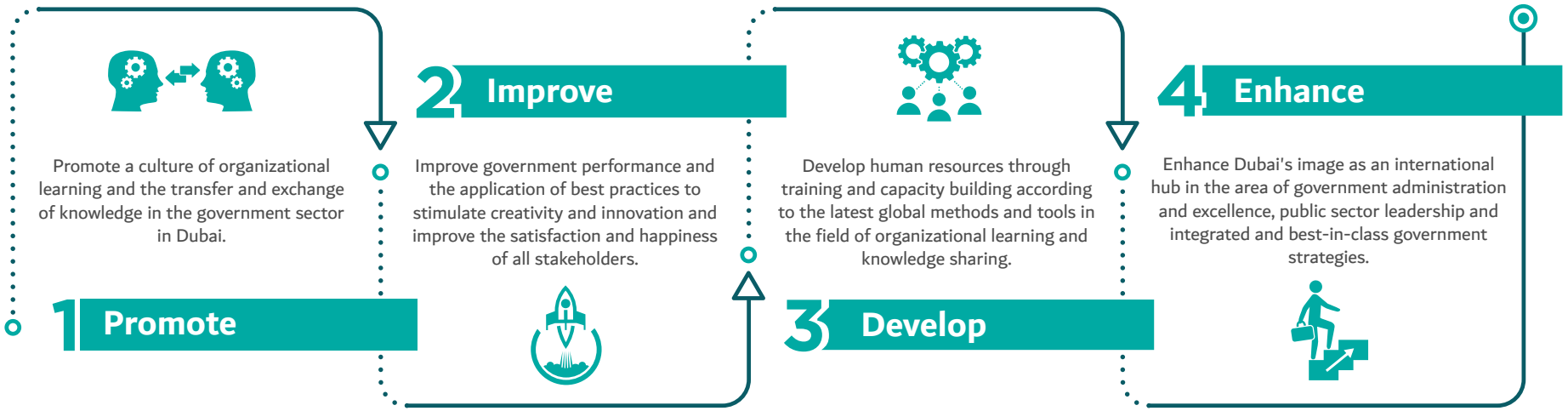
Dubai We Learn Meeting, 22nd of December, 2019

The Dubai We Learn Initiative

1.1 Introduction

Dubai We Learn was launched in October 2015 as part of the Dubai Government Excellence Programme (DGEP). The DGEP is a program of the General Secretariat of the Executive Council of Dubai. The 'Dubai We Learn' initiative was launched in co-operation with the Centre for Organisational Excellence Research (COER), New Zealand.

The initiative was launched with the following objectives in mind:



The Dubai We Learn Initiative

1.1 Introduction

The initiative consists of an Excellence Makers Program consisting of support for benchmarking projects (available to 10 to 13 government projects) over one year (Figure 1.1) and the provision of a best practice resource, www.BPIR.com (available to all 37 government entities).

Dubai We Learn	Commenced	Concluded	Number of DWL Projects	Participating Government Entities
1st Cycle	October 2015	October 2016	13	Dubai Center for Ambulance Services, Dubai Courts, Dubai Culture, Dubai Electricity & Water Authority, Dubai Land Department, Dubai Municipality, Dubai Police, Dubai Public Prosecution , Dubai Statistics Center, General Directorate of Residency & Foreign Affairs-Dubai, Knowledge and Human Development Authority, Mohammed Bin Rashid Housing Establishment and Roads & Transport Authority
2nd Cycle	April 2017	April 2018	11	Dubai Civil Aviation Authority, Dubai Center for Ambulance Services, Dubai Customs, Dubai Electricity & Water Authority, Dubai Government Human Resources Department, Dubai Health Authority , Dubai Municipality, Dubai Police, Dubai Public Prosecution, General Directorate of Residency & Foreign Affairs-Dubai and Knowledge and Human Development Authority
3rd Cycle	February 2019	December 2019	10	Community Development Authority, Dubai Center for Ambulance Services, Dubai Electricity & Water Authority, Dubai Health Authority, Dubai Land Department, Dubai Municipality, Dubai Police, Dubai Economy , General Directorate of Residency & Foreign Affairs-Dubai and Roads & Transport Authority

Figure 1.1: Dubai We Learn Cycles

The Dubai We Learn Initiative

1.2 The importance of benchmarking for government

It is important to reflect on why benchmarking and organizational learning have become so important to Dubai and governments in general. In recent years there has been increasing pressure on governments around the world to change the way they serve society. **In particular, to:**

- Become citizen-focused and accountable to citizens. Citizens see themselves as consumers of public services and expect governments to provide services that are tailored to the people who are using them. Services need to be user-centric rather than government-centric.
- Use new technologies that make the delivery of government services easier and more convenient for citizens. The convergence of four powerful forces: social, mobile, cloud, and information (big data and analytics), is driving innovation in the government sector. In particular, new technology is assisting with the development of more intelligent, interactive solutions that focus on individual needs.
- Be smart. Smart government integrates information, communication, and operational technologies to planning, management, and operations across multiple domains, process areas, and jurisdictions to generate sustainable public value. Smart government reduces unnecessary regulations, bureaucracy, and duplication of roles and services.
- Be connected and be seen as one service provider. An integrated government aims to make better use of resources to produce a more cohesive or 'seamless' set of services so that they are perceived to be provided by one service provider. Thus a 'one-stop-shop' may enable a resident to pay local taxes, get information about improvement grants, access local public health services and advice from a Citizen's Advice Bureau, all at the same premises, website, or via a mobile phone.
- Work with the private sector. Governments have turned to public and private partnerships and outsourcing as a way of accessing external expertise and delivering services more cost-effectively.

The Dubai We Learn Initiative

1.2 The importance of benchmarking for government

The world is changing by the minute. Principally, governments are expected to show agility in reinventing themselves and building citizens' trust. Besides citizen-driven demands, governments are having to cope with environmental and climate issues, increasing energy costs, changing demographics, and the liberalization of trade. These changes require a focus on effectiveness, efficiency, and innovation as a priority. There is an expectation that achieving "value for money" in the public sector is business as usual and not an exception or a one-off 'quality' objective.

To achieve such a standard of excellence, there is an amplified emphasis on public administration and ensuring there is a pool of expertise and stimulating best practice learning and exchange that helps to develop and prepare the current and next generation of able public administrators.

To assist governments in their improvement drive, more and more benchmark data has become available. Whilst this data is useful for comparison purposes it also serves to make governments more accountable as citizens can see how their country performs in comparison to others.

Examples of international metrics that are avidly monitored by governments include:

- ☑ The comparison of School systems (provided by PISA).
- ☑ National Innovation Index (provided by INSEAD and other partners).
- ☑ Global Competitiveness Report (provided by the World Economic Forum).
- ☑ Ease of Doing Business (provided by the World Bank).
- ☑ Government Effectiveness (provided by the World Bank).
- ☑ Transparency and Accountability (provided by Transparency International).
- ☑ Global Energy Architecture Performance (provided by World Economic Forum).
- ☑ Gender Inequality Index (provided by United Nations Development Program).
- ☑ World Health Statistics (provided by the World Health Organisation).

The Dubai We Learn Initiative

1.2 The importance of benchmarking for government

In this time of the COVID-19 pandemic, it has never been more important for governments to undertake benchmarking and learn from best practices, it can literally mean the difference between life and death for the citizens of a country. For example, in partnership with COER in April 2020, DGEP launched an accelerated benchmarking initiative called "Dubai We learn – Conquering COVID-19" to provide best practices and ideas to the Dubai Executive Council's Supreme Committee of Crisis and Disaster Management. Projects were undertaken on:

1. Crisis Management
2. Health
3. Food Security
4. Economy
5. Societal Behaviour.

With the Dubai Government's previous experience in benchmarking it was able to mobilise and complete these projects within two-months, with information continually fed to the Crisis Committee. A report titled 'Managing and Recovering from the COVID-19 Pandemic" documents the best practices identified by this project.

Benchmarking and organizational learning are seen as a necessity by forward-thinking governments. Indeed, benchmarking has been embraced by the Dubai government for many years, but "Dubai We Learn" has accelerated the learning and strengthened the impact. Dubai We Learn supports Dubai's 2021 plan, Dubai's 10X projects designed to propel the city 10 years ahead of other global cities, and the UAE Centennial 2071 project designed to make the UAE the best country in the world by 2071.

When considering "what is benchmarking", it is important to understand that benchmarking is much more than performance comparison. Benchmarking is a change management approach that sparks and enables innovation. Benchmarking provides solutions and not just comparisons. Benchmarking through 'learning from the experience of others' and seeing new and different approaches changes mindsets and opens up new possibilities – this leads to paradigm shifts and innovation. Benchmarking includes the process of identifying, adapting, creating, and implementing high performing practices to produce superior performance results.

The Dubai We Learn Initiative

1.3 Excellence Makers Program

The Excellence Makers Program consisted of Benchmarking training (using the TRADE Best Practice Benchmarking Methodology) and research and facilitation support for 10 benchmarking teams. Each project team was based in a different government entity and the foci of the benchmarking project were chosen to reflect the priorities of the different entities. In effect, the projects would fast-track the transformation of key government processes or services by learning from best practices while simultaneously developing the capacity of employees in the government entities to use benchmarking as a tool for improvement.

Project team dynamics:

In preparation for starting the benchmarking projects, all the government entities were requested to tender potential projects and teams for consideration by DGEP and COER. The project teams would comprise between 4 to 8 team members that were expected to spend a proportion of their work time on the benchmarking project.

The time spent on the project would vary by team and by team member, but would typically range between half a day and a full day per week per person. Each project required a Team Leader to lead and take responsibility for the project, a Benchmarking Facilitator to provide benchmarking expertise and ensure that the TRADE Methodology was followed, and an Administrator to support the Team Leader and Benchmarking Facilitator with some of the administrative tasks. The other team members brought their technical expertise to the project. In addition, a Project Sponsor was required to ensure that the team was appropriately resourced to undertake the project. The Project Sponsor was typically a senior executive or director.

Project selection criteria:

Over 20 projects were tendered for consideration to be part of the program from which 10 projects were selected for participation (Figure 1.2). The projects were selected based on their potential benefits to the government entity, the government, and the citizens/residents of the Dubai Emirate. The commitment of the government entities, including their mandatory presence at all the programs and events, was also a consideration in the selection of the projects.

Figure 1.2: H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum with the ten benchmarking teams representing the government entities participating in Dubai We Learn, 2019.

The Dubai We Learn Initiative

1.3 Excellence Makers Program

International benchmarking expertise by COER:

The one-year projects commenced in February 2019. The following services were provided by COER to support the benchmarking teams:

- Two three-day training workshops on the TRADE Best Practice Benchmarking Methodology were held from 18-20, and 25-27 February 2019 with five teams attending each workshop. The training enabled the teams to understand the benchmarking methodology and how it could be used for their specific projects. Figure 1.3 shows Dr. Hazza Khalfan Alnuaimi,Coordinator General - Dubai Government Excellence Program,Introducing one of the knowledge sharing sessions and Figure 1.4 shows some of the participants. In Figure 1.5, Dr Robin Mann, Director, COER is advising one of the teams and in Figure 1.6, Dr Zeyad El-Kahlout, Senior Quality & Excellence Advisor, DGEP, is seen addressing the teams.

Figure 1.3: Dr Dr. Hazza Alnuaimi introducing one of the knowledge sharing sessions.

Figure 1.4: Team members at the 18-20 February, 2019, TRADE training workshop.

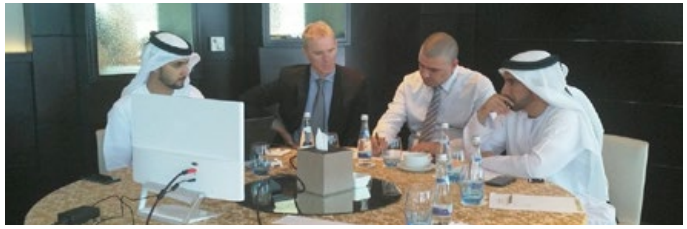


Figure 1.5: Dr Robin Mann (centre) supervising the DHA project team at the TRADE workshop.

Figure 1.6: Dr Zeyad El-Kahlout addressing the teams during the training.

The Dubai We Learn Initiative

1.3 Excellence Makers Program

International benchmarking expertise by COER:

- A full set of training materials in Arabic and English, including Benchmarking Manual, and TRADE Project Management System. This would serve as reference material during the one-year project, as well as for future projects.
- To aid all the teams in their best practice search journey, a specialised Desktop Research Skills Workshop was conducted by COER on 7 July 2019 (Figure 1.7).
- Access to the Best Practice Improvement Resource for all participants. BPIR.com provides an on-demand resource of best practices from around the world.
- Centralised tracking of the progress of all the projects through a review of each team's submitted TRADE Spreadsheets with expert advice given in a bi-monthly report.
- Desktop research to identify best practices and potential benchmarking partners was conducted for each benchmarking team to supplement their search for best practices.

Figure 1.7: Desktop Research Skills Workshop by Ahmed Abbas, COER, (centre).

The Dubai We Learn Initiative

1.3 Excellence Makers Program

International benchmarking expertise by COER:

- [x] Four Knowledge Sharing Summits (Figures 1.8 to 1.11) were held, at which each project team gave a presentation on their progress to-date. This was an opportunity to share, learn, and encourage constructive discussions between the teams, gauge their development, and guide the teams with expert feedback.

Figure 1.8: Dubai Corporation for Ambulance Service presenting at the 1st Knowledge Sharing Summit.

Figure 1.10: Dr Hazza Al Neaimi, Coordinator General, DGEP, asking questions at the 3rd Knowledge Sharing Summit.

Figure 1.9: Dubai Police presenting at the 2nd Knowledge Sharing Summit.

Figure 1.11: Roads and Transport Authority answering questions from the audience at the 3rd Knowledge Sharing Summit.

The Dubai We Learn Initiative

1.3 Excellence Makers Program

International benchmarking expertise by COER:

- Personalised meetings with the project teams at their place of work in the week before or after the Knowledge Sharing Summits to provide detailed advice and feedback.
- Four Team Leader and Benchmarking Facilitator meetings were held to provide specific advice on each stage of TRADE and encourage sharing between the teams.
- All teams were required to complete a Benchmarking Report and deliver a final presentation on their project. These were assessed by an expert panel using the recognition system provided by the TRADE Benchmarking Certification Scheme.

Figure 1.12: Team Leaders and Benchmarking Facilitators Meeting.

Chapter 2

TRADE
Best Practice Benchmarking

The TRADE Best Practice Benchmarking Methodology was developed by Dr. Robin Mann for the New Zealand Benchmarking Club in the early 2000s. The TRADE Methodology provides a structured approach for guiding benchmarking teams step by step from inception to delivery of a benchmarking project. The methodology ensures that the teams are better positioned to concentrate on learning and improvements when conducting benchmarking projects rather than worrying about how to manage the project.

The structure and rigour of the TRADE Methodology ensure that a professional research approach is applied which incorporates change management, risk management, and benchmarking expertise.

The name of “TRADE” symbolises the importance of forming benchmarking partnerships with the intent of “trading information and knowledge” between organisations. Benchmarking should not be seen as a one-way exchange of information. It should be mutually beneficial so that relationships can be maintained and grow so that the partners can learn from each other again when the need arises.

TRADE Best Practice Benchmarking

2.1 Structure of the TRADE Best Practice Benchmarking Methodology

The TRADE Methodology consists of 5 stages, with each stage made up of between 4 and 9 steps as shown in Figure 2.1.

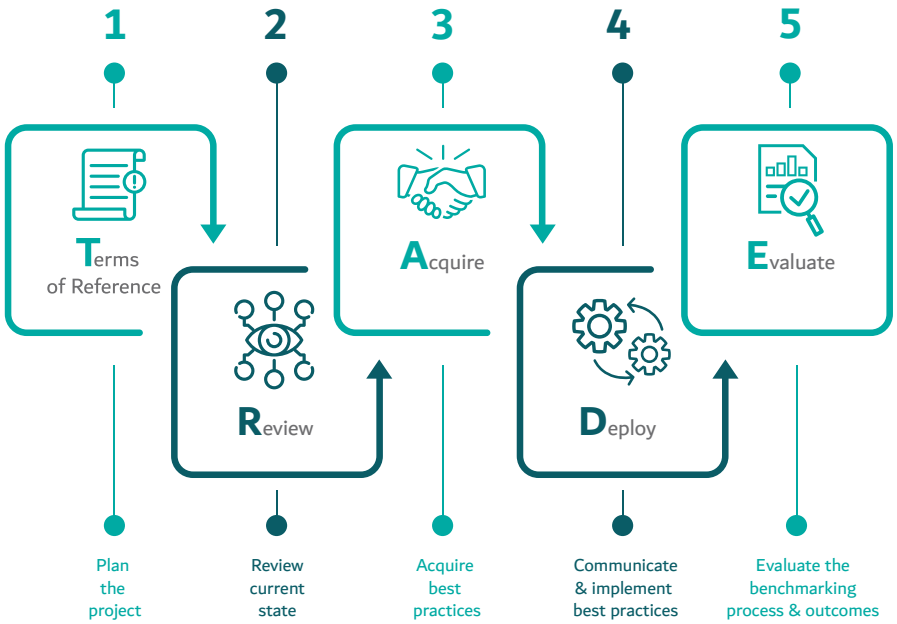


Figure 2.1: TRADE Benchmarking stages and steps.

1. Determine area of focus for benchmarking project.
2. Develop project brief.
3. Form project team.
4. Train project team.
5. Understand benchmarking code of conduct.
6. Prepare Terms of Reference (TOR).
7. Develop documentation system.
8. Review project progress and TOR.
9. Obtain approval to start the next stage of TRADE.

1. Understand area of focus to be benchmarked.
2. Define performance measures.
3. Identify current performance.
4. Prioritise and finalise the practices to be benchmarked.
5. Review project progress and TOR.
6. Obtain approval to start the next stage of TRADE.

1. Establish criteria for selecting benchmarking partners.
2. Select potential benchmarking partners.
3. Invite and acquire benchmarking partners.
4. Prepare for data collection.
5. Collect and store data.
6. Analyse data.
7. Formulate recommendations.
8. Review project progress and TOR.
9. Obtain approval to start the next stage of TRADE.

1. Communicate findings.
2. Develop action plan.
3. Obtain approval for action plan.
4. Implement actions.
5. Review project progress and TOR.
6. Obtain approval to start the next stage of TRADE.

1. Perform cost/benefit analysis.
2. Review TRADE project.
3. Share experiences and project outcomes.
4. Close project.

TRADE Best Practice Benchmarking

2.1 Structure of the TRADE Best Practice Benchmarking Methodology

The five main stages of the TRADE methodology are:

1. Terms of Reference – plan the project

The first stage is to plan the project. This stage involves forming a project team and obtaining the support of a project sponsor and developing the Terms of Reference (TOR). The TOR (refer to Figure 2.2) provides the foundation for a successful project and should include a clear aim, scope, expected benefits, resources required, expected time-line and identification of stakeholders with a clear communication plan to ensure that the stakeholders are engaged in the project from start to finish.

The TOR are reviewed continually throughout the project. They are used as a guide to ensure that the initial objectives are kept in focus. It is important that the team members take ownership of the TOR.

TERMS OF REFERENCE (TOR) FORM

Organisation:				
Project Name:				
Last Date Revised:				
Project Sponsor and Team Members				
Name	**Position**	**Telephone**	**Email**	**Project Role**
				Sponsor
				Team Leader
				Benchmarking Facilitator
				Administrator
				Team Member
				Team Member
				Team Member

Document Revision History				**Project Sponsor Reviewed? Yes/No**
Version	**Date**	**File name**	**Revision Notes**	
1			First Draft	

Aim Describe the purpose of the project in one sentence e.g. "To identify & implement best practices in X to improve performance from YtoZ.	
Scope What is included & excluded from the project? Clearly define the boundaries of the project & any time-line/resource constraints.	
Background Why is the project needed? What are the challenges/ Opportunities? Who determined the need?	
Objectives Include SMART objectives with at least one objective per TRADE stage as well as outcome objectives to be measured in the Evaluate stage	

Expected Non-Financial Benefits What problems/challenges/opportunities and performance levels do you expect improvements in? What are the benefits for your stakeholders? ideally the benefits should be quantifiable showing current performance (and date measured) and expected future performance (by a stated date).	**Expected Financial Benefits** For every non-financial benefit there is a potential financial benefit. Financial benefits should be shown as monetary values otherwise include in the non-financial column. Financial benefits for your stakeholders may be included.

Figure 2.2: Part of a Terms of Reference (TOR) form

TRADE Best Practice Benchmarking

2.1 Structure of the TRADE Best Practice Benchmarking Methodology

2. Review current state

The second stage involves reviewing the extent of the current problem or issue. This stage ensures that the project team has a thorough understanding of their own organisation's systems, processes, and performance before learning from other organisations, and helps to identify precisely the areas for which best practices will be sought.

This stage requires measuring current performance in the area of focus (if not already known) and seeks the views and obtains data from various stakeholders (such as internal customers or suppliers, process owners, external customers or suppliers and the community at large) that are being impacted by the process.

Surveys, structured interviews, focus groups, self-assessments, Fishbone diagrams, SWOT analysis, process mapping, and brainstorming are used to obtain and evaluate the information obtained. Often as a result of conducting the Review stage, refinements to the TOR are made.

TRADE Best Practice Benchmarking

2.1 Structure of the TRADE Best Practice Benchmarking Methodology

3. Acquire best practices

This stage involves identifying which organisations are likely to have superior practices and finding out what they do differently. Various methods can be used such as internet research, surveys, site visits and online meetings.

This is an important stage where the team gets an opportunity to analyse and understand the processes and practices of other organisations and compare these to their own. Organisations with superior practices can be identified in different ways, including internet research, best practice groups, national and international award winners, and recommendations from professionals. In carrying out benchmarking visits, the teams must adhere to a Benchmarking Code of Conduct – a code of ethics for benchmarking.

The output from this stage is a set of recommendations that can be presented to the project sponsor and key stakeholders in the Deploy stage. These recommendations are based on the team's learning of best practices combined with the team's own ideas that have been formulated as a result of a detailed analysis of the area of focus and the input from key stakeholders.

Figure 2.3 illustrates that benchmarking is not solely about learning best practices from other organisations. Benchmarking sparks creativity within the benchmarking team and wider stakeholder group to come up with new solutions or "next practices".

Figure2.3: Benchmarking provides a winning formula for innovation

TRADE Best Practice Benchmarking

2.1 Structure of the TRADE Best Practice Benchmarking Methodology

4. Deploy– Communicate and implement best practices

This stage involves communicating the team's recommendations to the project sponsor and relevant stakeholders, deciding what should be changed with the current practice or process, and implementing the changes. The practicality of this stage and the potential impact that it can have on the organisation requires that the benchmarking team works in partnership with the process owners and with the support of the project sponsor and other senior executives within the organisation.

Important decisions on resources, roles and responsibilities, and timeframe for implementation need to be made. Often it is a case of many new practices being introduced and so it is important they are appropriately planned and adapted to fit the organisation's needs. For large or substantial changes, it is sensible to pilot the change before full deployment.

5. Evaluate– Evaluate the benchmarking process and outcomes

This stage is designed to make sure that the project has delivered the expected benefits that were outlined in the Terms of Reference. It involves undertaking a cost and benefits analysis and a general review of how well the process is performing. If the expected benefits are not being realised, an investigation needs to occur and may require further learning from the benchmarking partners. A project is usually only closed once the aim and objectives of the project have been met. Typically, benchmarking teams will take the lessons from one completed benchmarking project to the next project, and thereby improve their knowledge and skills in benchmarking over time.

TRADE Best Practice Benchmarking

2.2 The TRADE Project Management System

TRADE is supported by a project management system utilising a TRADE Spreadsheet that consists of over 20 worksheets and over 40 template forms provided in the TRADE Training Manual. This ensures that the TRADE stages and steps are followed and documented, enabling easy tracking of the benchmarking projects. Figure 2.4 shows some of the worksheets used to guide the benchmarking projects. With all the teams using TRADE worksheets, it becomes very easy for COER and DGEP to follow their progress and provide advice as necessary. For instance, Figure 2.5 shows the progress made by each of the benchmarking teams through the TRADE Methodology stages after 3 months of the program.

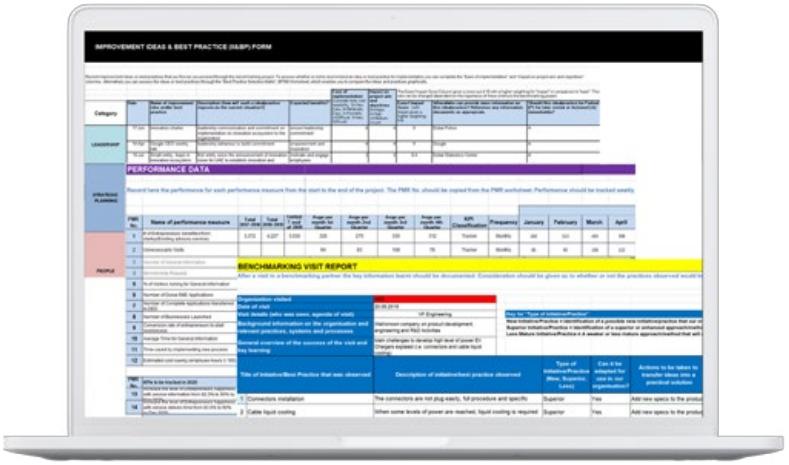


Figure 2.4: Examples of TRADE Worksheets used for guiding benchmarking projects.

Figure 2.5: Progress of the benchmarking teams through the TRADE Methodology stages after 3 months.

TRADE Best Practice Benchmarking

2.3 TRADE Certification Levels

Individuals and teams that are trained in and apply the TRADE Methodology can be certified at three different levels – Bronze, Silver, and Gold (Figure 2.6).

TRADE Benchmarking Certification Levels	Logo Mark
Trade Benchmarking Trained Certificate (BRONZE) Awarded to all those that have been trained at a TRADE Benchmarking Workshop	
Trade Benchmarking Proficiency Certificate (SILVER) Awarded to TRADE trained individuals that have undertaken a TRADE benchmarking project and demonstrated benchmarking proficiency. Submissions are graded using a star system as shown in the table below:	
Trade Benchmarking Mastery Certificate (GOLD) Awarded to individuals that have undertaken and/or facilitated two benchmarking projects that have achieved TRADE Benchmarking Proficiency or higher with atleast one project receiving a Commendation grade.	

Assessment grades	Certificate awarded
7 Stars	TRADE Benchmarking Proficiency Certificate with Commendation.
5 to 6 Stars	TRADE Benchmarking Proficiency Certificate with Commendation.
3 to 4 Stars	TRADE Benchmarking Proficiency Certificate.
1 to 2 Stars	Incomplete.

Figure 2.6: TRADE Benchmarking Certification Levels.

TRADE Best Practice Benchmarking

2.3 TRADE Certification Levels

Certification at the Bronze level is achieved after completing a training course on TRADE. On completion of a benchmarking project, a benchmarking report and supporting documentation such as the TRADE Spreadsheet can be submitted to COER for assessment. If the project receives an assessment grade of 3 to 4 Stars or higher, the proficiency level (Silver level) is conferred. For benchmarking mastery (Gold level), project team members must have undertaken and/or facilitated two benchmarking projects that have achieved proficiency or higher with at least one project receiving at least a 5 to 7 Star commendation grade.

For the third round of Dubai We Learn Excellence Makers projects, 72 staff from Dubai government entities were trained to TRADE Bronze level, and all projects were completed at a minimum of 3 to 4 Star level, therefore, achieving benchmarking proficiency (Silver Level). In total, over the three cycles of projects, 210 Dubai Government staff have been trained thus facilitating a significant injection of new and important skillsets across a variety of government functions. In the long-term, it is expected that many of these staff will achieve the highest level of benchmarking certification – Benchmarking Mastery (Gold level) – to date twelve individuals have achieved this level. These highly trained individuals will be expected to lead the introduction of structures and approaches that foster a culture of best practice learning in Dubai.

Chapter 3

The Benchmarking Projects

The Benchmarking Projects

Government Entities	Project Title	Aim of the project
Community Development Authority (CDA)	Enabling Happiness	To identify and implement best practices that engage, empower, and enlighten employees leading to elevated levels of employee happiness, loyalty, motivation, communication, innovation, and productivity.
Dubai Corporation for Ambulance Services (DCAS)	Moonshot: Is Where the Magic Happens	To develop a vibrant Moonshot innovation ecosystem in line with international best practices to further DCAS' readiness for the future.
Dubai Electricity and Water Authority (DEWA)	DEWA EV Green Charger 2.0	To develop a new user-friendly EV Green Charger which supports seamless customer experience by 2021 as an interim solution until the standardization of a single EV charging solution occurs.
Dubai Health Authority (DHA)	Dubai Heart Safe City	To reach a survival rate of above 65% for Out of Hospital Sudden Cardiac Arrest (OHCA) incidents by 2025 in the Emirate of Dubai, saving approximately 800 lives per annum; and to make Dubai The Safest Heart City in the world.
Dubai Land Department (DLD)	Smart Property Valuation	To provide an instant, reliable, and robust unit valuation service.
Dubai Municipality	Digital Transformation of Contracts (DTC)	To find and implement best practices to accelerate the service contracts process from an average of 210 days (2018) to 45 days (December 2019).

The Benchmarking Projects

Government Entities	Project Title	Aim of the project
Dubai Police	Safe Bags (Airport Secure Luggage)	To find and implement best practices to enhance the efficiency and operational capacity of the Hold Baggage Screening System (HBS) as well as the productivity of employees engaged within the different processes and levels of the HBS in Dubai Airports by EXPO 2020.
Dubai Small and Medium Enterprises (Dubai SME)	Improving Entrepreneurs' Start-Up Guidance and Support Services	To improve the process of qualifying and supporting Emirati entrepreneurs to start viable businesses.
General Directorate of Residency and Foreigners Affairs (GDRFA)	Cooperative Integrated System (CIS)	To design a one-year roadmap that will lead to an effective Cooperative Integrated System (CIS) between GDRFA's Strategy, Innovation, PMO, Operations, and Excellence Departments in 2019 with full implementation achieved by December 2020.
Roads and Transport Authority (RTA)	Return on Innovation (ROI) for Agile Innovation Journey	To create and develop a reliable and simple framework for realising innovation benefits (termed as Return on Innovation (ROI) to improve the innovation journey and make it more flexible and agile, based on best practices.

Figure 3.1: Description of the 10 benchmarking projects.

The upcoming sections of this book present a case study on each project. The case studies describe how each project progressed through the five stages of TRADE. Each case study concludes with a table summarising the project's achievements.

Chapter 4

Community
Development Authority

Enabling Happiness

CDA: Enabling Happiness

Community Development Authority (CDA)'s benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (5-6 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER). This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 4.1: HE Abdulla Albasti, Secretary General, The Executive Council of Dubai, awarding CDA team 5-6 stars Certification.

4.1 Terms of Reference

Background:

CDA's 250 employees play an important role in facilitating social services to those in financial need and vulnerable groups such as recovering addicts and people with special needs or disabilities (named as people of determination within the UAE). It is important that CDA's employees are happy and motivated to provide the best service possible to these vulnerable groups. In recent years, CDA has seen a decline in its employee satisfaction survey results with employee turnover rising and a drop in productivity. CDA's Employee Engagement Survey in 2018 revealed 13% of its staff were engaged, 63% were not engaged and 24% were actively disengaged.

The benchmarking initiative was thus commissioned in January 2019 to enhance employee happiness and engagement.

Project Aim:

The project aimed to identify and implement best practices that engage, empower, and enlighten employees leading to elevated levels of employee happiness, loyalty, motivation, communication, innovation, and productivity.

CDA: Enabling Happiness

4.2 Review

CDA reviewed the current situation through analysing previous employee happiness survey results and brainstorming issues of concern. Figure 4.2 highlights some of the key challenges identified.

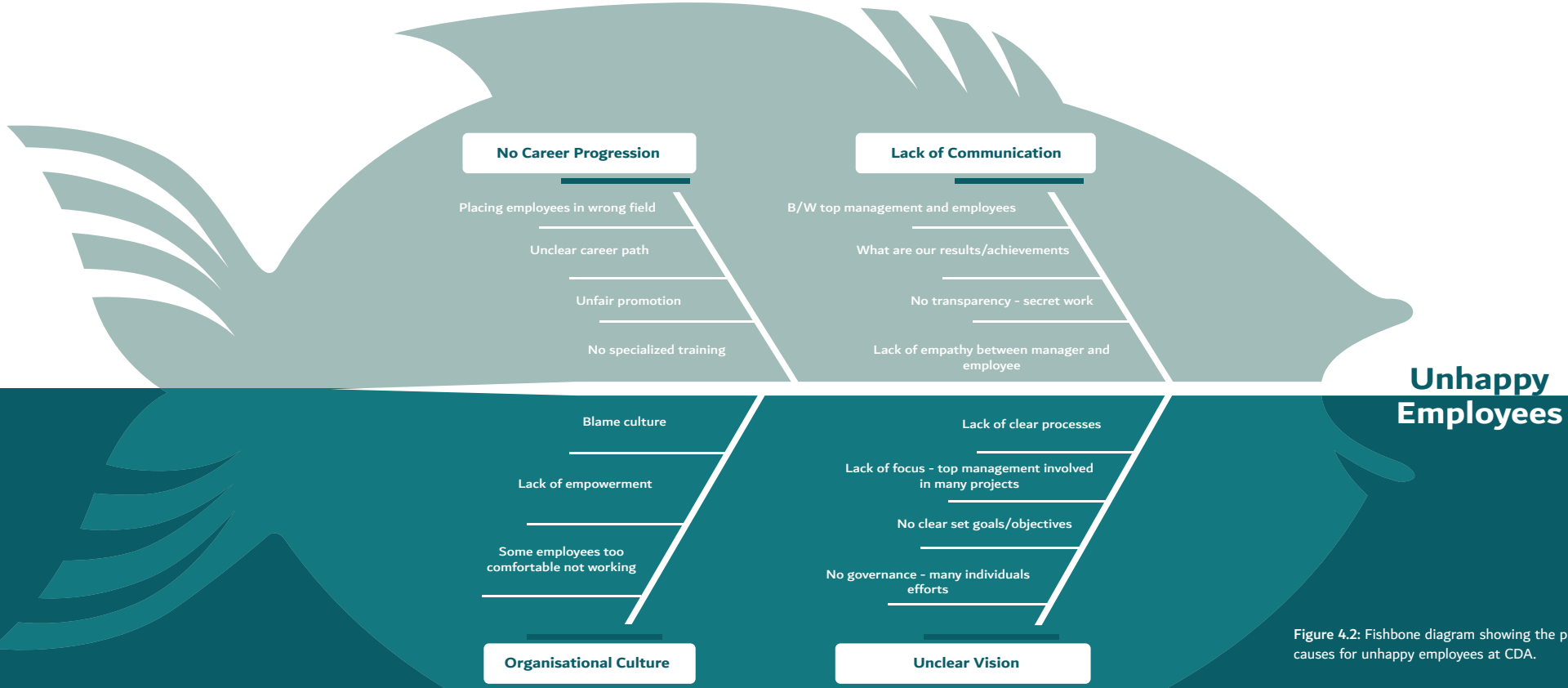


Figure 4.2: Fishbone diagram showing the probable root causes for unhappy employees at CDA.

CDA: Enabling Happiness

4.2 Review

Next, the team decided it was important to hold focus groups to identify the main issues more precisely with 50% of staff met in total. These focus groups identified several areas of concern (complaint areas), refer to Figure 4.3, which helped to explain CDA's decline in Employee Happiness according to the Dubai Government Excellence Program's survey.

Employee Happiness (DGEP Results)				
Main Criteria	**2016**	**2017**	**2018**	**Comments**
Happiness	80%	70%	65%	15% down in two years only
Satisfaction	74%	61%	57%	17% down in two years only
Harmony	77%	67%	64%	13% down in two years only
Loyalty	72%	59%	55%	17% down in two years only
Total Results	76%	64%	60%	16% down in two years only

The results supported the data found earlier

Complaint Category	Number of Complaint
HR Department & Procedures	94
Top Management (Leadership Style)	50
CDA Work Environment	85
KPI's & IPP	10
Motivation, Appreciation & Incentives	90

Figure 4.3: Employees Happiness DGEP Report (2016, 2017, 2018) supporting the findings from focus group discussions (2019).

CDA: Enabling Happiness

4.2 Review

The Director General and senior management team of CDA strengthened their involvement in the project after reviewing the benchmarking team's findings. With the Director General's support, the team decided to organise a "Happier Work Environment" workshop at which 80% of staff attended, refer to Figure 4.4. This was the first time in CDA's history that a whole day workshop with all its staff had been arranged to openly discuss challenges and find solutions. The workshop was a major success and 11 cross-functional teams were set-up to identify and implement quick wins to increase employee happiness, refer to Figure 4.5.

Figure 4.4: HE Ahmad Julfar, Director General, CDA leading the "For Happier Work Environment" workshop.

Figure 4.5: Process to identify and implement quick wins.

CDA: Enabling Happiness

4.2 Review

The quick win projects addressed Flexible Timing, Motivation Programs, Training & Development, Compensation & benefits, Governance, Individual Performance Plan, Performance Management, and Communication.

CDA defined measures to monitor the progress and performance of the project (Figure 4.6).

Criteria	Performance Indicators
Employee satisfaction and participation	• Satisfaction level - Percentage of employees (Empowerment and Happiness). • Number of initiatives to enhance employees satisfaction. • Number of participants in happiness initiatives.
Loyalty	• Number of resignations. • Employee turnover rate.
Motivation	• Number of employees received monetary rewards (Quarterly). • Absenteeism rate per month. • Number of 1-day sick leave per month.
Communication	• Number of employee complains and grievances.
Innovation	• Number of suggestions/ideas per employee per month. • Number of suggestions/ideas approved per month. • Number of suggestions/ideas implemented per month.
Customer satisfaction	• Customer Happiness.
HR	• Number of employees trained per month.

Figure 4.6: KPIs to evaluate the success of the Employee Happiness Initiatives.

CDA: Enabling Happiness

4.3 Acquire

For the Acquire stage, the CDA benchmarking team identified the areas that they wished to find best practices in:

- Approaches to quickly transform a dispirited work culture into a highly motivated, engaged, and happy work culture.
- Strategies/initiatives that have resulted in high levels of employee engagement/ happiness.
- Senior leadership team as role models in creating a high-performance workforce.
- Developing an environment where there is excellent communication and cooperation between all staff.
- Performance Management Systems for measuring and improving the performance of employees.
- Role and structure of the Human Resource Department to support a high-performance work culture.

In addition, 'Top UAE companies in employee happiness' was another criterion for the best practices search.

The local organisations benchmarked were Dubai Courts (UAE), Dubai Statistics Centre (DSC) (Figure 4.7–Figure 4.8), and Dubai Knowledge and Human Development Authority (KHDA). One or more of CDA's CEOs attended the benchmarking visits with the team, demonstrating their commitment to the project.

Figure 4.7: Benchmarking Visit to Dubai Courts.

Figure 4.8: Benchmarking Visit to Dubai Statistics Centre.

CDA: Enabling Happiness

4.3 Acquire

The team learnt from Dubai Courts that the Director-General conducts weekly open meetings with new and existing employees to answer their queries and receive suggestions, breaking the barrier of bottom-up communication. Also, leadership programs from the top universities in Dubai are provided. DSC practices an open-door policy and the team celebrates an employee's personal successes and joys, while also expressing solidarity during their difficult times like a death in the family. Particularly enlightening was DSC's initiative that encouraged their employees to avoid bank loans by providing a Social Insurance Fund for their personal needs such as housing, and emergency expenses. CDA's third benchmarking partner KHDA were awarded TRADE Benchmarking 5-6 Stars by COER in 2018 for their project on holacracy – a team-based approach for organising work that empowers employees and reduces the levels of hierarchy within an organisation. CDA were impressed with KHDA's business model and stimulating Google-style work environment with open office design and multiple workspaces including a coffee room and gym.

In total, the team identified and reviewed over 100 best practices with the majority found through intensive desk-top research, a combined approach by CDA and COER's researchers.

CDA: Enabling Happiness

4.4 Deploy

The team selected 32 best practices for implementation as quick wins. These consisted of 10 in the area of happiness, 10 in communication, 11 in training and development, and 1 in reward and motivation, refer to (Figure 4.9 – Figure 4.19). Key improvements included the introduction of flexible working hours to assist with work-life balance and the development of a delegation authority matrix showing clear responsibilities and transparency in human resource decisions and shared with all employees. These were all implemented in 2019 either by the benchmarking team or through the quick win teams that were set-up in the Review stage of TRADE.

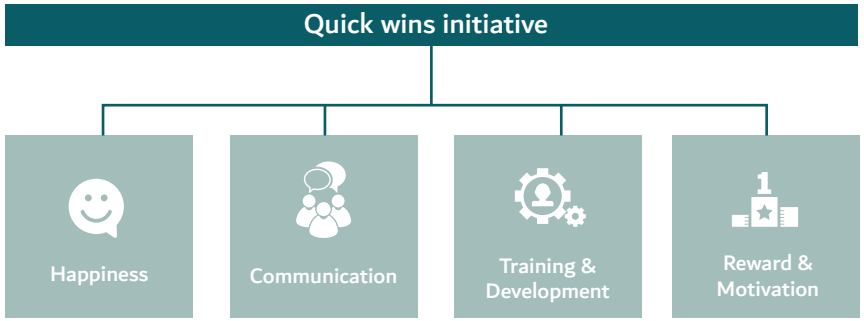


Figure 4.9: Implemented quick wins (2019).

Quick wins initiative Implemented March to December

1. Fazaa card.
2. Renewal Esaad offers card.
3. Happiness wheel.
4. Dubai ladies club offers.
5. Etisalat offers with CDA.
6. Drawing happiness
7. Happiness card.
8. The champion of happiness & positivity.
9. MG team building.
10. Omrah trip.

1. Employee gathering "internal" tolerance session with Ali Al Saloom.
2. Employee gathering "external".
3. Tolerance & positive session with Fahad Haikal.
4. DG breakfast with employees.
5. CEO's outdoor sessions with their employees.
6. Employees happiness groups discussion.
7. Delegation authority and matrix.
8. Formulating cross functional teams.
9. Workshop for happier work environment.
10. Weekly meeting with top management.

1. Emotional intelligence.
2. The tools of life-work balance.
3. Positivist thinking & self motivation.
4. The power of focusing.
5. The four perspectives of innovation.
6. Achieving objectives lead to success.
7. Summer training activities.
8. Training & coaches circle.
9. Train the trainer.
10. Scholarship (Master).
11. UAE government leadership program.

1. Recognition and motivational programs.

CDA: Enabling Happiness

4.4 Deploy

Figure 4.10: Happiness Wheel rewards CDA employees on a quarterly basis with cash, gift voucher, hotel stay, etc.

Figure 4.11: 'The Drawing Happiness' initiative celebrates employees' special occasions, such as, new-born baby.

Figure 4.12: An IMG Adventure World CDA team building exercise was arranged in Nov. 2019.

Figure 4.13: Entirely sponsored by CDA, an Umrah trip was organised in Nov. 2019 for the employees.

Figure 4.14: A Communications Workshop on Tolerance and Positivity.

CDA: Enabling Happiness

4.4 Deploy

Figure 4.15: In 2020, updated attendance and compensation policies, specialized trainings, and employee grievances system will be deployed as identified by the workshop.

Figure 4.16: 'Thursday Employee Meeting with the Director-General (Sawalef)' to encourage communication and discuss employee issues (total 46 employees Oct '19-Dec '19, ongoing).

Figure 4.17: CDA started a Recognition and Rewards Program for outstanding achievement in specific areas. Employees rewarded with monetary benefits: Q1 (16), Q2 (42), Q3 (47).

Figure 4.18: Regular breakfast with the Director General as a reward for some employees and team achievement; and weekly meeting with the top management.

Figure 4.19: Theme of the Annual Employee Gathering, 2019 was 'CDA & YOU' with activities to enhance communication and loyalty.

CDA: Enabling Happiness

4.4 Deploy

The purpose of implementing so many quick wins was to gain the confidence of employees and provide a positive work environment. For 2020, many of the quick wins will continue alongside the implementation of a 2020 Happiness Plan that has been agreed to by the project sponsor and Director General. The plan includes updating or introducing the following:

- Attendance policy.
- Rewards policy.
- Training plan (with specialized training for social work).
- Compensation and benefits policy.
- Authority matrix.
- Linking employees' goals with organizational strategy.
- Performance indicators.
- Employee grievances system.

Finally, all employees are looking forward to the CDA office layout changing to an open, lively environment for better engagement and communication.

CDA: Enabling Happiness

4.5 Evaluate

To gauge the preliminary impact of the implemented quick wins, results were calculated for some of the designated KPIs from the review stage. CDA has planned to apply the performance measures monthly to regularly monitor the effects before a final employee happiness survey that will be conducted in April 2021 to assess the 2019-2021 project outcomes. The results displayed that 85% of employees participated in the various happiness initiatives in 2019 as compared to 0% in 2018 (Figure 4.19).

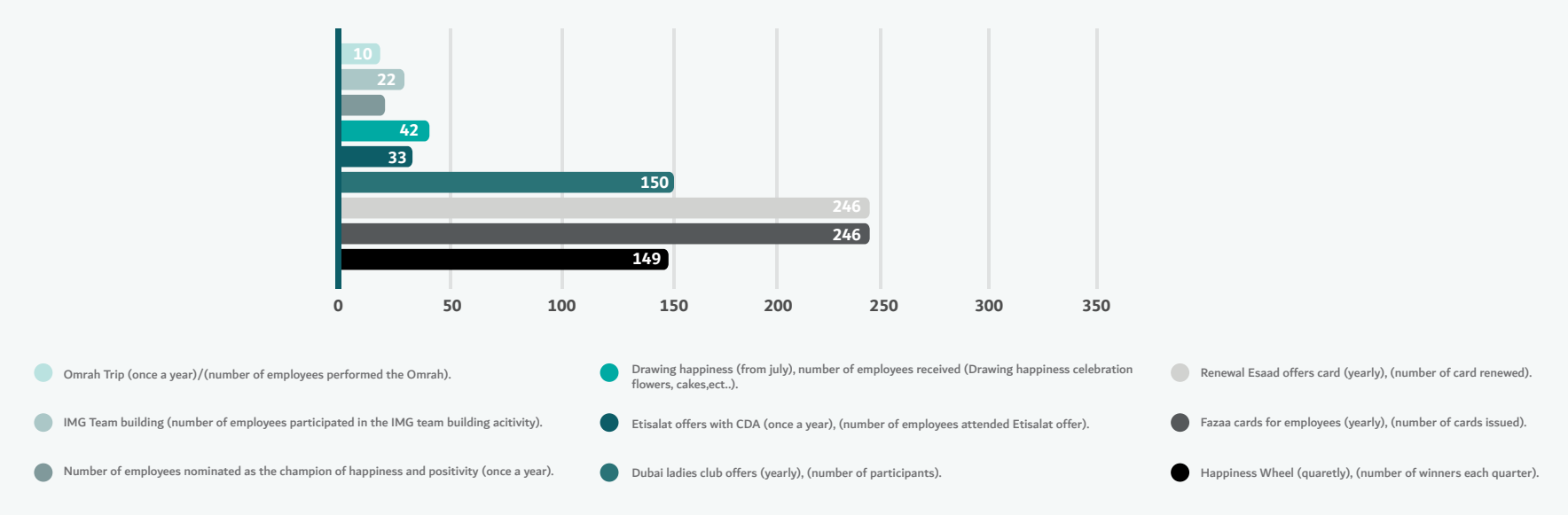


Figure 4.19: Snapshot of employee engagement in the various 'Enabling Happiness' initiatives, 2019 (in numbers).

Early indications are that these improvements are having a positive effect with a decrease in employee absenteeism from 4.6 in Apr 2019 to 3.8 in Oct 2019 and a decrease in the number of 1-Day Sick Leave Per Month from 0.99 in Feb 2019 to 0.56 in Oct 2019. With the implementation of the 2020 Happiness Plan the results are expected to further improve.

Summary of project achievements of CDA

Terms of Reference

Aim:

The project aimed to identify and implement best practices in implementing transforming projects and initiatives that engage, empower, and enlighten employees leading to elevated levels of employee happiness, loyalty, motivation, communication, innovation, and productivity.

Review

Situation analysis:

A situation analysis using SWOT and fishbone analysis identified concerns in internal communication, organisational culture, unclear vision, and no career progression. The 2018 Employee Engagement Survey revealed 63% of employees were not engaged and 24% actively disengaged and DGEP's Employee Happiness Survey indicated a downward spiral in employee happiness of 76% (2016), 64% (2017), and 60% (2018). A focus group qualitative study identified 329 employee concerns in various categories – HR Department and procedures (94), motivation, appreciation and incentives (90), work environment (85), top management leadership style (50), and KPIs (10).

Acquire

- **Methods of learning:** Desktop research, site visits, brainstorming sessions.
- **Number of best practices identified via desktop research:** 102.
- **Number of site visits:** 3.
- **Number of organisations interviewed (by site visit or phone calls):** 3.
- **Names of organisations interviewed (by site visit) and countries:** Dubai Courts (UAE), Dubai Statistics Centre (UAE), Dubai Knowledge and Human Development Authority (UAE).
- **Number of best practices identified via site visits:** 10.
- **Number of improvement ideas by the benchmarking team:** 18.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 130.
- **Number of best practices/improvements ideas recommended for implementation:** 40.

Summary of project achievements of CDA

Deploy

- **Number of best practices/improvements approved for implementation:** 40.
- **Description of key best practices/improvements approved for implementation:** 32 quick wins were implemented and a 2020 Happiness Plan of more substantial practices was agreed to including an attendance policy, rewards policy, training plan (with specialized training for social work), compensation and benefits policy, authority matrix, linking employees' goals with organizational strategy, performance indicators, and employee grievances system. Quick wins included: 1. Issuing of Fazza and Essad Cards for all employees for various benefits and discounts. 2. Flexible working hours to achieve work-life balance. 3. Director General's weekly meeting with employees to discuss issues and encourage communication 4. 'Drawing Happiness' initiative to celebrate employees' special occasions 5. Sponsoring Umrah trips for employees.

Evaluate

- **Key achievement:** Implementing, within one year, 32 quick wins to transform CDA employees from highly disengaged to a happier workforce. In addition, a 2020 Happiness Plan has been developed based on best practices. From 0% happiness initiatives in 2018 to 85% staff engagement in the various programs in 2019 was a remarkable shift. Impressive early results reported, for example, a decrease in employee absenteeism from 4.6% in Apr 2019 to 3.8% in Oct 2019, and a reduction in 1-day sick leave per month from 0.99 in Feb 2019 to 0.56 in Oct 2019. An increase in employee loyalty, empowerment, communication, satisfaction, productivity, and happiness levels are expected once the plan is fully implemented.

Non-financial benefits achieved within one year and expected future benefits:
Decrease in employee absenteeism from 4.6% in Apr 2019 to 3.8% in Oct 2019.
A decrease in the number of 1-day sick leaves per month from 0.99 in Feb 2019 to 0.56 in Oct 2019.
85% of employees participated in 30 happiness initiatives in 2019 as compared to 0% in 2018.
246 employees were recipients of Fazaa and Esaad Cards, 149 happiness wheel winners (quarterly), 150 female staff received the Dubai Women's Club yearly memberships, 10 employees were sponsored for an Umrah trip.
Positive feedback was received in Dec 2019 for the implemented happiness wheel, Umrah visit, and weekly DG meeting.
Impact on productivity and customer happiness to be measured in future and final happiness survey in Apr 2021.

Financial benefits achieved within one year and expected future benefits:
Utilized the allocated budget for the 2019 Recognition Program to deploy quick wins, resulting in cost savings.
An expected increase in productivity to be measured in 2020.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	20 Feb 2019	13 March 2019	17 June 2019	20 March 2019	-
Finish	12 March 2019	17 May 2019	15 July 2019	Continuous	April 2021

Chapter 5

Dubai Corporation for Ambulance Services

Moonshot: Is Where the Magic Happens

DCAS: Moonshot: Is Where the Magic Happens

Dubai Corporation for Ambulance Services (DCAS)'s benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (7 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER). This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

5.1 Terms of Reference

Background:

DCAS is responsible for providing emergency and prehospital care to individuals in distress due to acute ailment or trauma. The need to accelerate innovation in DCAS was to predict events before they occur, speed up response time, provide the best clinical care, empower the community with skills to manage emergencies, manage the rising cost of conventional emergency tools, and enhance efficiency and sustain resources.

UAE holds an ambition to become a global innovation incubator, making it one of the most innovative countries in the world by the year 2021.

These factors influenced DCAS to adopt a dynamic and innovative organizational approach and culture to solve the existing challenges and align itself with the vision of its topmost leadership.

Figure 5.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awarding DCAS' team 7 Stars TRADE Certification.

The Moonshot Innovation Ecosystem was thus launched as a greenfield project to accelerate innovation through developing innovation-centric strategies, systems and workforce. Through innovation, DCAS would achieve operational excellence and become a pioneer in world-class emergency services (Figure 5.2).

Figure 5.2: DCAS Moonshot Innovation Ecosystem.

DCAS: Moonshot: Is Where the Magic Happens

5.1 Terms of Reference

Project Aim:

The aim of the project was to develop a vibrant ***Moonshot Innovation Ecosystem*** in line with international best practices to further DCAS' readiness for the future. Within the timeline of Dubai We Learn, the project team would through learning from best practices develop a comprehensive blueprint defining what is meant by a ***Moonshot Innovation Ecosystem*** and develop a masterplan on how to achieve it. The expectation was that a fully mature innovation ecosystem system would be in place by December 2021 with implementation beginning in the second half of 2019.

As the Moonshot project is a vital government directed initiative, the team ensured that senior leadership and all stakeholders were engaged throughout the different project phases. They established a detailed communication plan to facilitate collaboration, trust, ideas exchange, and provide a clear sense of direction on what the organization aspired to achieve.

5.2 Review

The benchmarking team began the Review stage by thoroughly studying all existing documents and activities for the various components of the innovation ecosystem such as its innovation strategy which had been in place since 2016, and the challenges therein. The DCAS team utilized a self-assessment tool called Innovation Maturity Model – Landgate Innovation Program, Australia, available at COER's BPIR.com. 34 employees participated in this task. 6 of the 11 categories in the model revealed a status of 'Innovation Deficiency' with innovation maturity ranging between 0-10% for these categories.

Fishbone analysis reflected a fragmented dysfunctional innovation ecosystem (Figure 5.3); and SWOT analysis helped the team frame the issues and communicate them to the stakeholders. These activities helped DCAS to achieve a realistic situational assessment. The initial review helped to reinforce belief among the leadership in the project.

DCAS: Moonshot: Is Where the Magic Happens

5.2 Review

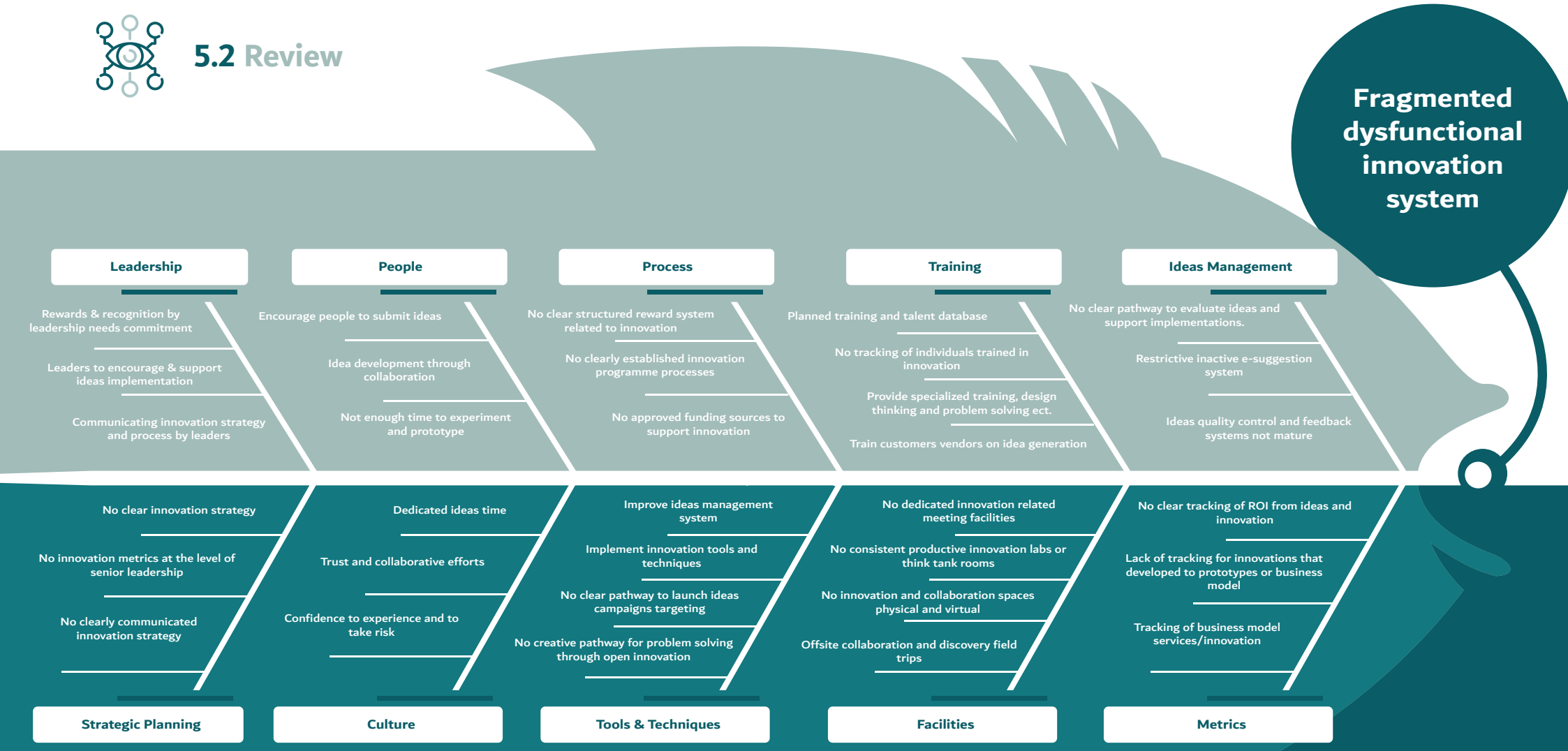


Figure 5.3: Fishbone analysis.

DCAS: Moonshot: Is Where the Magic Happens

5.2 Review

Other activities carried out at this stage included:

- An evaluation of the existing idea management system revealed a negative trend in ideas submission by employees, and their implementation (Figures 5.4 and 5.5).

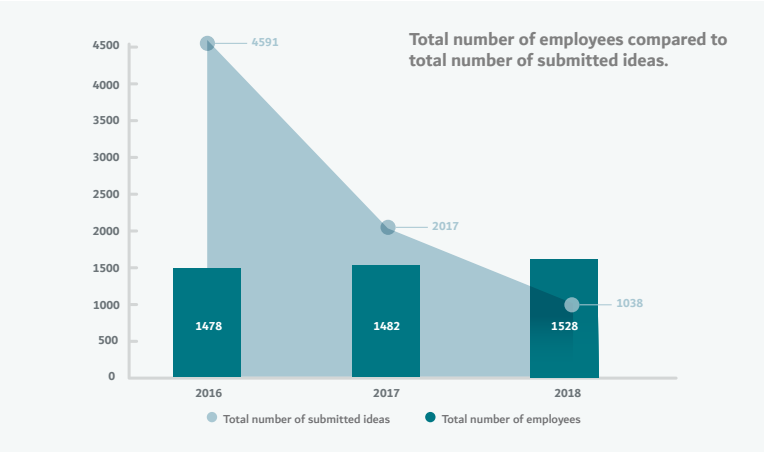


Figure 5.4: Downward trend in ideas submission.

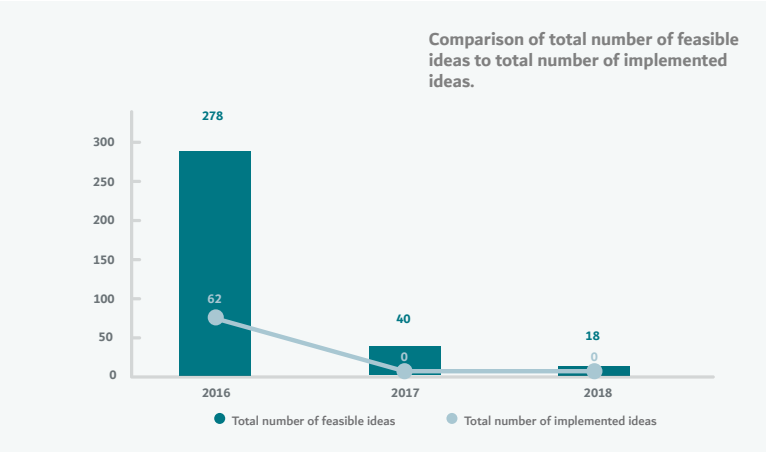


Figure 5.5: Inactive ideas implementation system (2017-18).

DCAS: Moonshot: Is Where the Magic Happens

5.2 Review

Other activities carried out at this stage included:

- [x] A comprehensive Gap Analysis of the innovation management/ecosystem was conducted based on the review tools used. The current state revealed the following (Figure 5.6):

Innovation Ecosystem Categories	Current State
• Strategy • Ideas Capture • Ideas Management • Tools • Process	No updated and clearly defined innovation management framework, strategy & processes.
	No clear relation between innovation products and related processes.
	Underdeveloped ideas management system.
	Rewards system for ideas and innovation need to be updated for internal and external parties.
	Innovation knowledge management databases/resources needs to be developed to support learning and continuous improvement.
	No defined structure or guidelines for conducting innovation labs.
	No clear direction or approach to define and engage partnerships in innovation.
	No allocated budget to support innovation strategy and projects.
	Innovation strategy at DCAS needs to be updated and communicated.
	No approach for open innovation. No existing accreditation of innovation management system.
	No dedicated unit for innovation in DCAS with clear roles, accountabilities and right expertise.
	No plans for benchmarking visits to enhance learning in the area of innovation management.
	No registered IPs or Patents in the name of DCAS.

DCAS: Moonshot: Is Where the Magic Happens

5.2 Review

Innovation Ecosystem Categories	Current State
• Training • People • Leadership	Lack of planned and structured innovation training (specialized and general) with clear targets.
	No clear approach to motivate and engage people. Low trust in innovation management system.
	No innovation communication plan, through different out-of-the-box channels and tools.
	No targeted well-structured specialized training program for innovation champions and experts. No database of trained and skilled ambassadors in DCAS.
	Inadequate collaboration, and unplanned joint projects with any potential collaborators with partners mapping.
	Employee individual performance contract lacks any innovation related KPIs relevant to innovation or ideation/suggestions.
	Unclear leadership engagement and support for Innovation.
• Metrics & Performance	No innovation diagnostic, awareness or maturity assessment conducted over the past 3 years. Recently launched innovation maturity was biased, and no clear conclusions was derived from it.
	No innovation management KPIs/Metrics with targets and clear ownership, or measurable return on investment records.
	No periodic or annual reports to monitor and improve innovation management, innovation achievements & learnings.

Figure 5.6: Findings from Gap Analysis.

DCAS: Moonshot: Is Where the Magic Happens

5.3 Acquire

The Acquire stage began by identifying the criteria that would be used for searching for best practices and selecting benchmarking partners. These criteria reflected the gaps shown in the Review stage of TRADE, with the top 7 criteria being:

- A roadmap for transforming an organizational culture.
- Leadership role in driving innovation culture.
- Work environment, facilities to support innovation.
- Recognition and reward systems.
- Training and development.
- Innovation process.
- Innovation culture.

From the best practice search, a list of 37 organisations were identified as potential benchmarking partners. Of these 7 were identified to learn from through site visits, these organisations were selected as they were all UAE based and the site visits could all be undertaken within the time-line of Dubai We Learn. A further 9 were identified for future benchmarking visits, survey, or virtual communication, most of these were international. In addition to the use of site visits, extensive desk-top research was undertaken to understand and identify relevant best practices.

Before the site visits, the team created a detailed survey with questions categorised by the chosen areas of focus. The UAE organisations visited were Google Middle East Headquarters (Dubai), Dubai Police, Dubai Statistics Centre, Dubai Health Authority's Dubai Health Innovation Centre, Mohammed Bin Rashid Space Centre (Dubai), Etisalat Innovation Lab (Dubai) and HUAWEI Innovation Lab (Dubai HQ) (Figures 5.7 – 5.9). In addition, a virtual visit via video conferencing was carried out with Google Product Manager in Silicon Valley – San Francisco Bay (USA).

Some vital benchmarking inputs that the team received at the Google Middle East HQ were for the management and leadership to exhibit behaviour to build commitment towards innovation with training for teams and individuals provided. At the Dubai Statistics Centre, the team learnt how to collaborate with international bodies to build an innovation ecosystem. Visits to Dubai Police and Dubai Health Authority's Innovation Centre gave insights into effective KPIs to evaluate the innovation ecosystem; and a visit to Mohammed Bin Rashid Space Centre threw light on how to inspire employees towards innovation on a daily basis.

DCAS: Moonshot: Is Where the Magic Happens

5.3 Acquire

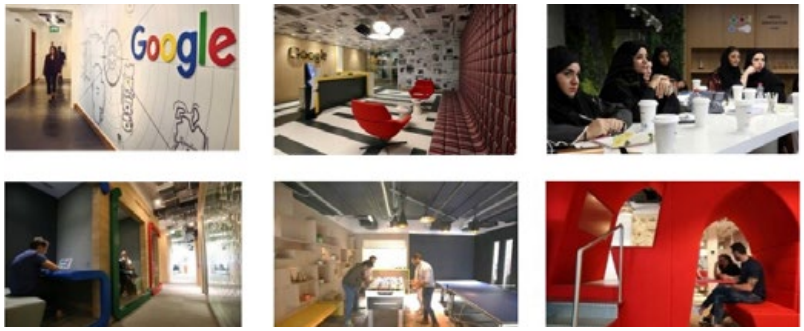


Figure 5.7: DCAS team visiting Google Middle East HQ, Dubai (UAE).

Figure 5.8: DCAS team visiting Dubai Statistics Center (UAE).

Figure 5.9: DCAS team visiting MBRSC (UAE).

DCAS: Moonshot: Is Where the Magic Happens

5.4 Deploy

As a result of an intensive Review and Acquire stage of TRADE the team collated 140 improvement ideas and best practices for consideration for deployment. The most important of these was the development of a Moonshot Innovation Ecosystem Framework consisting of 12 components (Figure 5.10). Stemming from this framework all the other ideas and best practices were linked and prioritised in terms of their potential impact and ease of implementation.

Key practices that were agreed to by DCAS' leadership team were a new organisational structure to support the implementation of the framework (Figure 5.11), Innovation Charter (Figure 5.12), a new Innovation Strategy and a detailed MasterPlan of how to implement the framework. The Innovation Strategy and Master Plan for 2019-2021 presented a clear roadmap with a vision, mission and 66 innovation KPIs to assess progress.

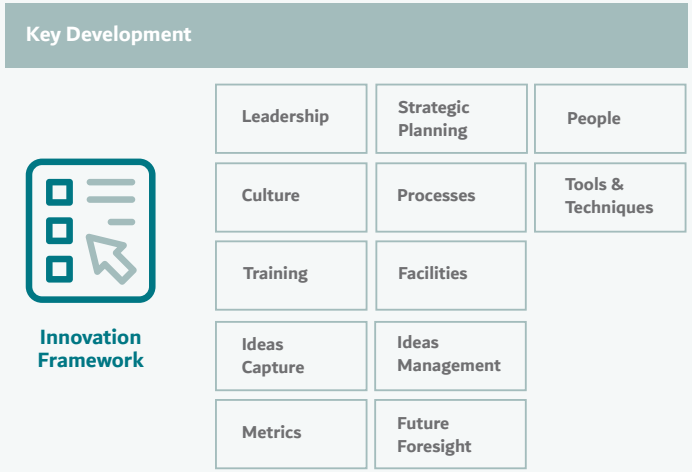


Figure 5.10: DCAS Moonshot Innovation Ecosystem Framework.

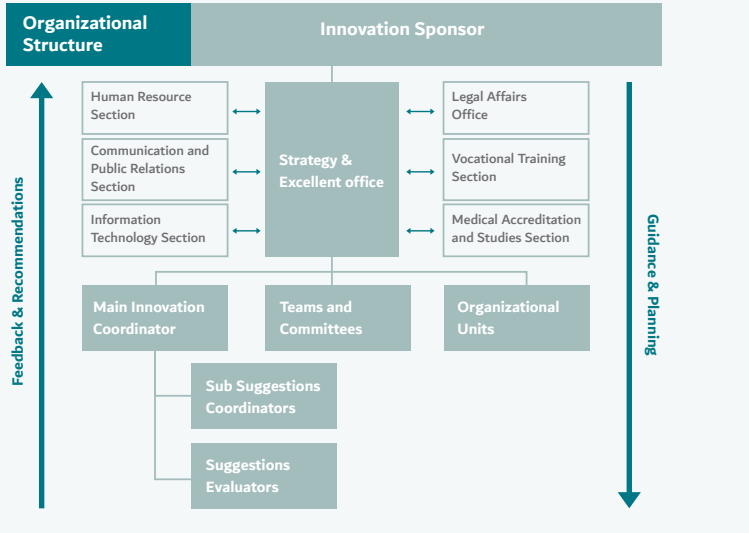


Figure 5.11: New organisational structure to support the DCAS Innovation Framework.

DCAS: Moonshot: Is Where the Magic Happens

5.4 Deploy

Figure 5.12: DCAS Innovation Charter.

Figure 5.13: A Rewards Ceremony at DCAS for feasible suggestions.

As part of the governance component of the innovation ecosystem, DCAS institutionalised its IP processes and policy to assure staff of the protection and ownership of their ideas; employees started inquiring about registering their innovations, one innovation was registered and two were under process. The team updated their Reward and Recognition Policy to encourage the use of the Ideas Platform and support employee engagement and happiness (Figure 5.13).

For change management and introducing innovation, DCAS launched six Innovation Labs and one Innovation Retreat with a primary focus on accelerating the generation of ideas, positive employee collaboration, and learning new tools such as design thinking. DCAS also initiated the Innovation Knowledge Hub – a system of standardised documentation and learning for all DCAS innovation projects.

DCAS: Moonshot: Is Where the Magic Happens

5.4 Deploy

Finally, DCAS designed an innovative future shaping tool called PARAMEDICS: Politics - Automation - Regulation - Ambulatory - Mobility - Economics - Demography - Infrastructure - Communication - Society.

The tool was implemented in the *Future Foresight Scenario Planning Lab* resulting in seven future projects to be achieved (Figure 5.14). This component is consistent with the Dubai Excellence Model's 2nd pillar (Innovation Management and Future Foresight).

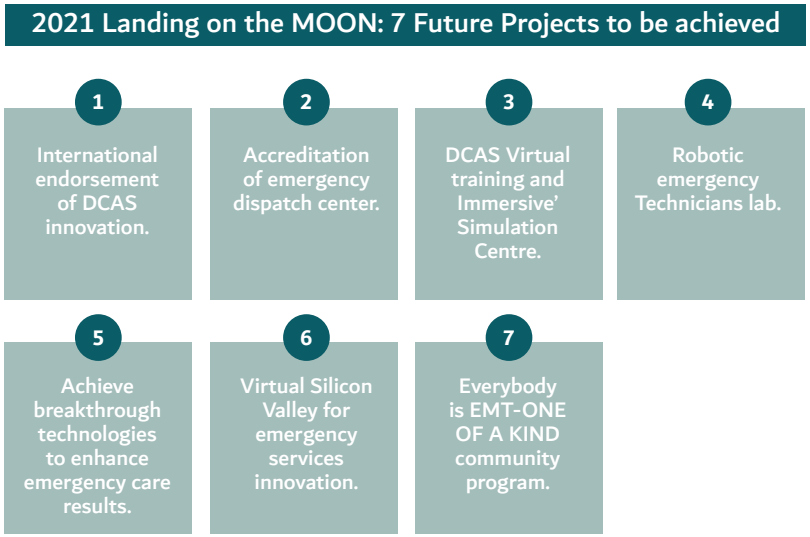


Figure 5.14: DCAS 2021 landing on the MOON.

DCAS: Moonshot: Is Where the Magic Happens

5.5 Evaluate

To evaluate the success of the project, the team reviewed whether it had achieved what it set out to achieve and whether it was on track to have a fully mature innovation ecosystem system by December 2021. With respect to the project's aims and objectives, the progress had been outstanding, with a number of major accomplishments:

- ☑ Development of Moonshot Innovation Ecosystem Framework, supporting strategy and charter and implemented a new organisational structure.
- ☑ Improvement in innovation maturity assessment score from 46% to 64% (Figure 5.15).

Innovation Maturity Results Ecosystem Results Before and After implementation

Figure 5.15: The DCAS Maturity Innovation Ecosystem Spider Diagram. The second lab exhibits very positive improvement across all 11 pillars of the Landgate Innovation Program Maturity Model.

DCAS: Moonshot: Is Where the Magic Happens

5.5 Evaluate

- Achieved Gold Level Accreditation in Ideas Management and Innovation from the international organisation Ideas UK (Figure 5.16).

Figure 5.16: DCAS Gold Accreditation by Ideas UK.

- Improved performance across multiple innovation related KPI's (Figure 5.17).

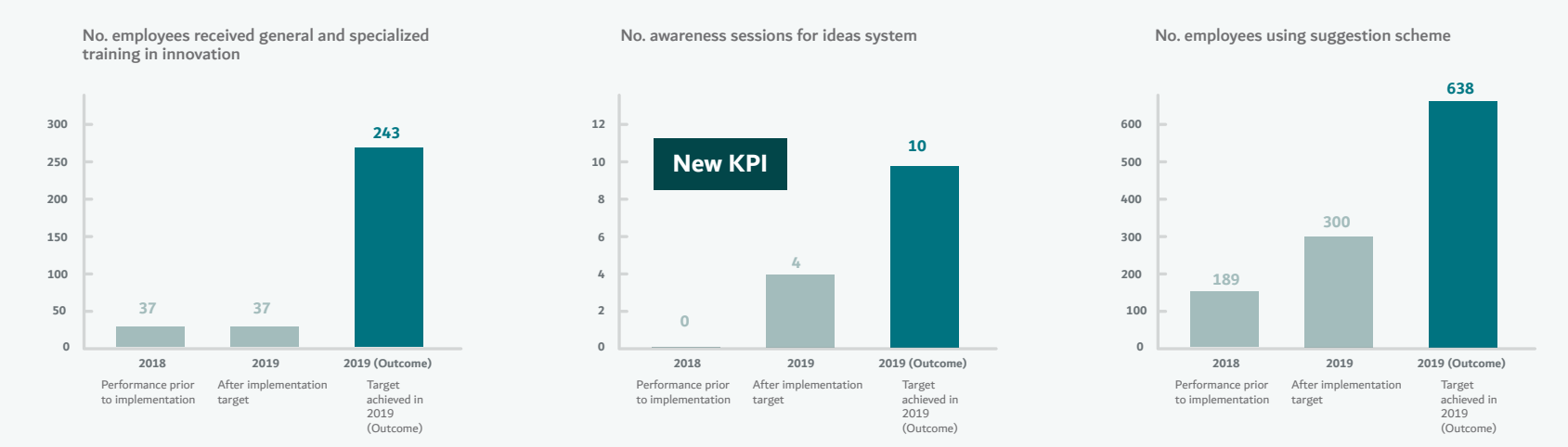


Figure 5.17a: Examples of some performance results based on innovation pillars.

DCAS: Moonshot: Is Where the Magic Happens

5.5 Evaluate

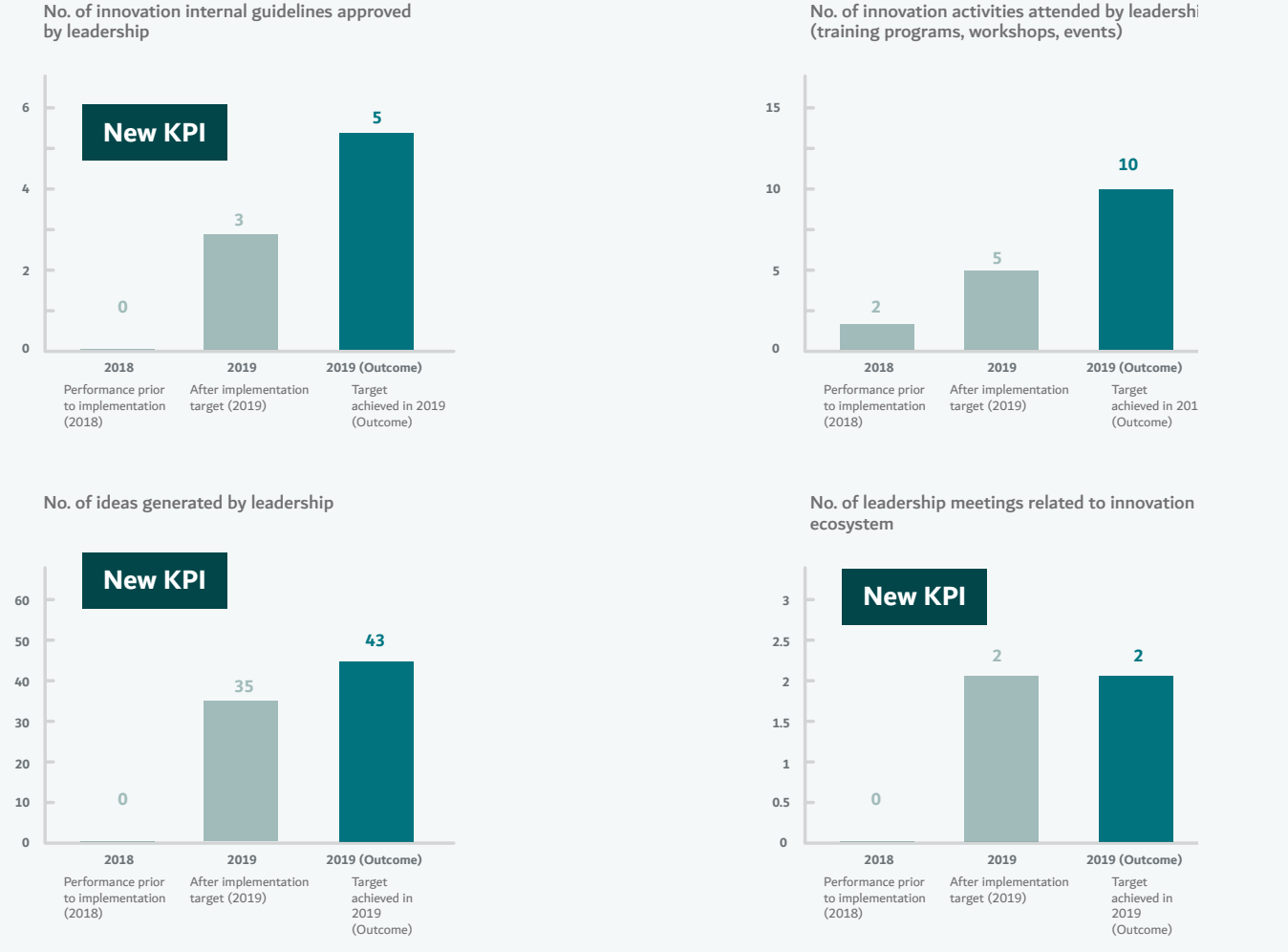


Figure 5.17b: Examples of some performance results based on innovation pillars.

Summary of project achievements of DCAS

Terms of Reference

Aim:

The aim of the project was to develop a vibrant Moonshot Innovation Ecosystem in line with international best practices to further our readiness for the future.

Review

Situation analysis:

DCAS has highly ambitious goals that require pioneering levels of innovation such as aspiring to achieve a 4-minute emergency response time by 2020, ultimately making it the fastest ambulance in the world. An in-depth analysis of DCAS' existing innovation strategy, and current state of innovation capabilities revealed multiple gaps and challenges. To address these gaps, the team decided that a radical overhaul of its innovation system was required. In the 10-month timeframe of Dubai We Learn the team would learn from best practices to develop a comprehensive blueprint defining what is meant by a Moonshot Innovation Ecosystem and develop a masterplan on how to achieve it. The expectation was that a fully mature system would be in place by December 2021 with implementation beginning in 2019.

Acquire

- **Methods of learning:** Desktop research, site visits, phone calls, conference calls, survey.
- **Number of best practices identified via desktop research:** 71.
- **Number of site visits:** 7.
- **Number of organisations interviewed (by site visit or phone calls):** 8.
- **Names of organisations interviewed (by site visit) and countries:** Google Middle East Headquarters (Dubai, UAE), Dubai Police (UAE), Dubai Statistics Centre (UAE), Dubai Health Authority's Dubai Health Innovation Centre (UAE), Mohammed Bin Rashid Space Centre (Dubai, UAE), Etisalat Innovation Lab (Dubai, UAE), HUAWEI Innovation Lab (Dubai HQ, UAE), Google (USA).
- **Number of best practices identified via site visits:** 40.
- **Number of improvement ideas by the benchmarking team**: 29.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 140.
- **Number of best practices/improvements ideas recommended for implementation:** 16.

Summary of project achievements of DCAS

Deploy

- **Number of best practices/improvements approved forimplementation:** 13.
- **Description of key best practices/improvements approved for implementation:** 1. DCAS Moonshot Innovation Ecosystem Framework consisting of 12 components 2. Innovation Strategy with a master plan with defined roles and responsibilities until the end of 2021 3. New organisational structure for innovation 4. Reward and Recognition Policy to boost organisational morale 5. Innovation Charter to activate leadership and employee engagement 6. Innovation ecosystem identity and branding to imbibe positive energy 7. IP processes and policy to protect 8. Launched six innovation labs 9. Innovation retreat to promote high engagement of stakeholders 10. Idea management induction sessions to promote suggestion scheme platform 11. Leadership innovation orientation 12. Innovation knowledge management to ensure documentation and readiness for external audits 13. Developed a future shaping tool (PARAMEDICS) and used it to design seven highly ambitious projects for 2021 “Landing on the Moon”.

Evaluate

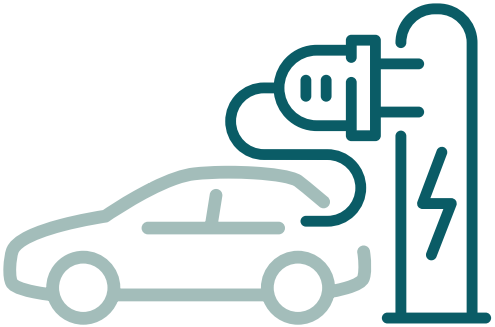
- **Key achievement:**
  The development and sign off of a Blueprint for a Moonshot Innovation Ecosystem by DCAS’ senior executives with key components implemented (innovation strategy/charter, organisational structure, ideas management process, innovation shaping tool and leadership engagement) with full maturity expected by Dec 2021. The Blueprint consists of 12 components (Leadership, Strategic Planning, People, Culture, Processes, Tools and Techniques, Training, Facilities, Ideas Capture, Ideas Management, Future Foresight, and Metrics) with 66 KPIs monitoring progress and outcomes. DCAS improved its innovation maturity score from 46% to 64% and received Gold Accreditation by Ideas UK. Laid the foundations to achieve operational excellence and become a pioneer in world-class emergency services.

Non-financial benefits achieved within one year and expected future benefits:
Development of blueprint for innovation with branding, communication and change management.
Improvement in Innovation Maturity Assessment Score from 46% to 64%.
Received Gold Accreditation for Ideas Management and Innovation by Ideas UK.
326 employees attended 6 innovation labs.
Increase in number of employees trained in innovation from 37 (2018) to 243 (2019).
Increase in number employees using suggestion scheme from 189 (2018) to 638 (2019).
Increase in number of prototype applications from 0 (2018) to 3 (2019).
Expected future benefits include 10-fold improvements in operational excellence and emergency services as new initiatives are launched and mature such as virtual training and immersive simulation, robotic emergency technician’s lab and creation of a virtual Silicon Valley for emergency services.

Financial benefits achieved within one year and expected future benefits:
Entire project was executed with zero direct costs with savings of AED 2,300,000 through using in-house resources rather than consultancy.
The savings and benefits for patients/stakeholders due to the expected innovations is estimated to be hundreds of millions of AED in the future.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	20 Feb 2019	13 March 2019	20 May 2019	01 Sep 2019	28 Nov 2019
Finish	13 March 2019	20 May 2019	01 Sep 2019	28 Nov 2019	19 Dec 2019

Chapter 6



Dubai Electricity and Water Authority

DEWA EV Green Charger 2.0

DEWA: EV Green Charger 2.0

Dubai Electricity and Water Authority (DEWA)'s benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (7 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER). This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 6.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awards DEWA's team 7 Stars TRADE Certification.

6.1 Terms of Reference

Background:

DEWA launched the EV (Electric Vehicle) Green Charger initiative in 2014 to support the Dubai Carbon Abatement Strategy 2021, and to promote sustainable transportation in Dubai by encouraging the Dubai public to switch from high emission internal combustion vehicles to zero-emission electric vehicles. The Emirate of Dubai has a target to have approximately 32,000 EVs and hybrids on Dubai roads by 2021 (2% of vehicles). DEWA has provided over 4,000 MWh of free electricity as an incentive for EV customers through its extensive public charging network. It has achieved a 1:2 ratio between EV chargers to registered EVs in Dubai through more than 350 public EV charging outlets.

The EV charging plug type changes depending on the car manufacturer or the country's/continent's regulations. The EV Green Charger 2.0 project was initiated due to the confusion faced by first-time DEWA EV fast charger users as there are three types of cables available at the station. This results in cases of frustrated customers leaving the charging cable on the ground leading to cable damage by the other customers accidentally driving over them. Currently, there is no standardised solution for users with different charging sockets. The main objective of this project is to have a user-friendly customer interface by designing an electric vehicle charger that allows the charger to notify the customer on the fastest charging mode specific to their type of vehicle, thus eliminating the multiple steps and time required for decision making and ensuring the fastest charging time. This project will subsequently lower the operational and maintenance costs of DEWA's fast chargers and increase revenue.

DEWA: EV Green Charger 2.0

6.1 Terms of Reference

Project Aim:

The aim of the project was to develop a new user-friendly EV Green Charger which supports seamless customer experience by 2021 as an interim solution until the standardization of a single EV charging solution occurs.

Figure 6.2 shows the stakeholders that have an interest in or would be impacted by the project. The identification of these stakeholders enabled the benchmarking team to determine their needs and when to engage them in the project.

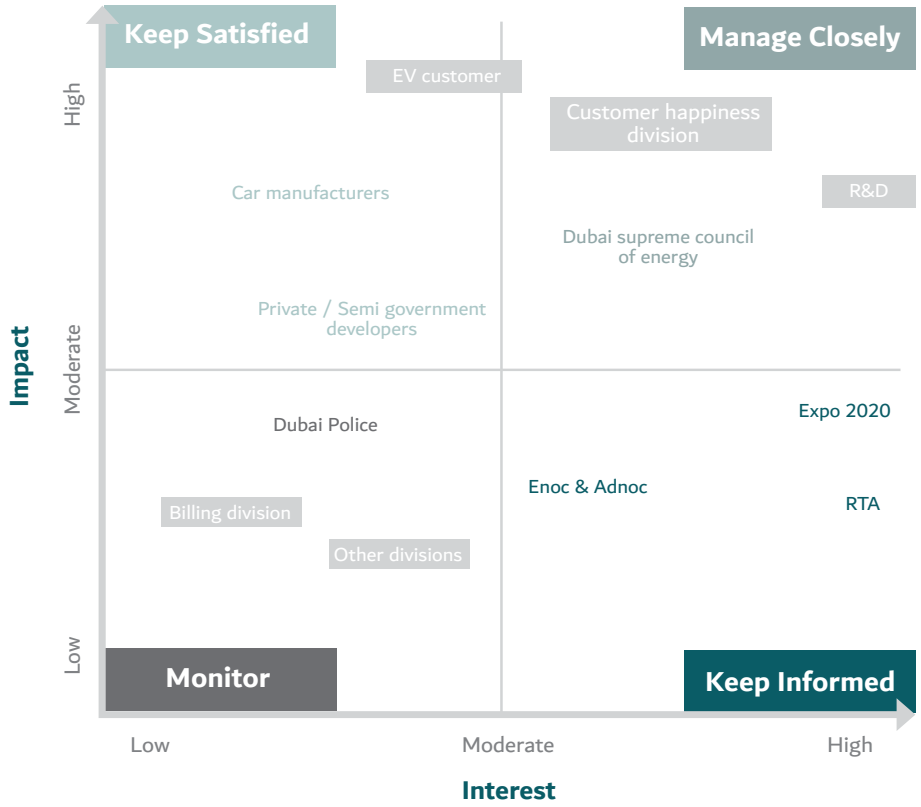


Figure 6.2: The project stakeholders.

DEWA: EV Green Charger 2.0

6.2 Review

On investigating the current situation, the team reviewed DEWA's 2018 survey which displayed a 73% satisfaction rate for customer experience in ease of EV charger use in Dubai. Currently, the accidental damage of charger cables and charger downtime led to operational/ maintenance costs and ensuing missed revenues of a total of AED 200,044 annually. The confusion and misuse of the wrong cable amounted to AED 81,707 per year in replacement costs.

The team undertook a fishbone (Figure 6.3) and SWOT analysis to investigate the issues concerning the EV charger. In addition, a process flow chart was drawn describing the current 4-step process. This analysis enabled the team to develop the concept for a faster 2-step charging cycle to reduce the charging process touchpoints and eliminate customer confusion (Figure 6.4) with a potential time saving of 2 minutes for each customer journey.

With this in mind, the Acquire stage of TRADE would be essential in terms of learning best practices in research and development and EV charger technology and application.

DEWA: EV Green Charger 2.0

6.2 Review

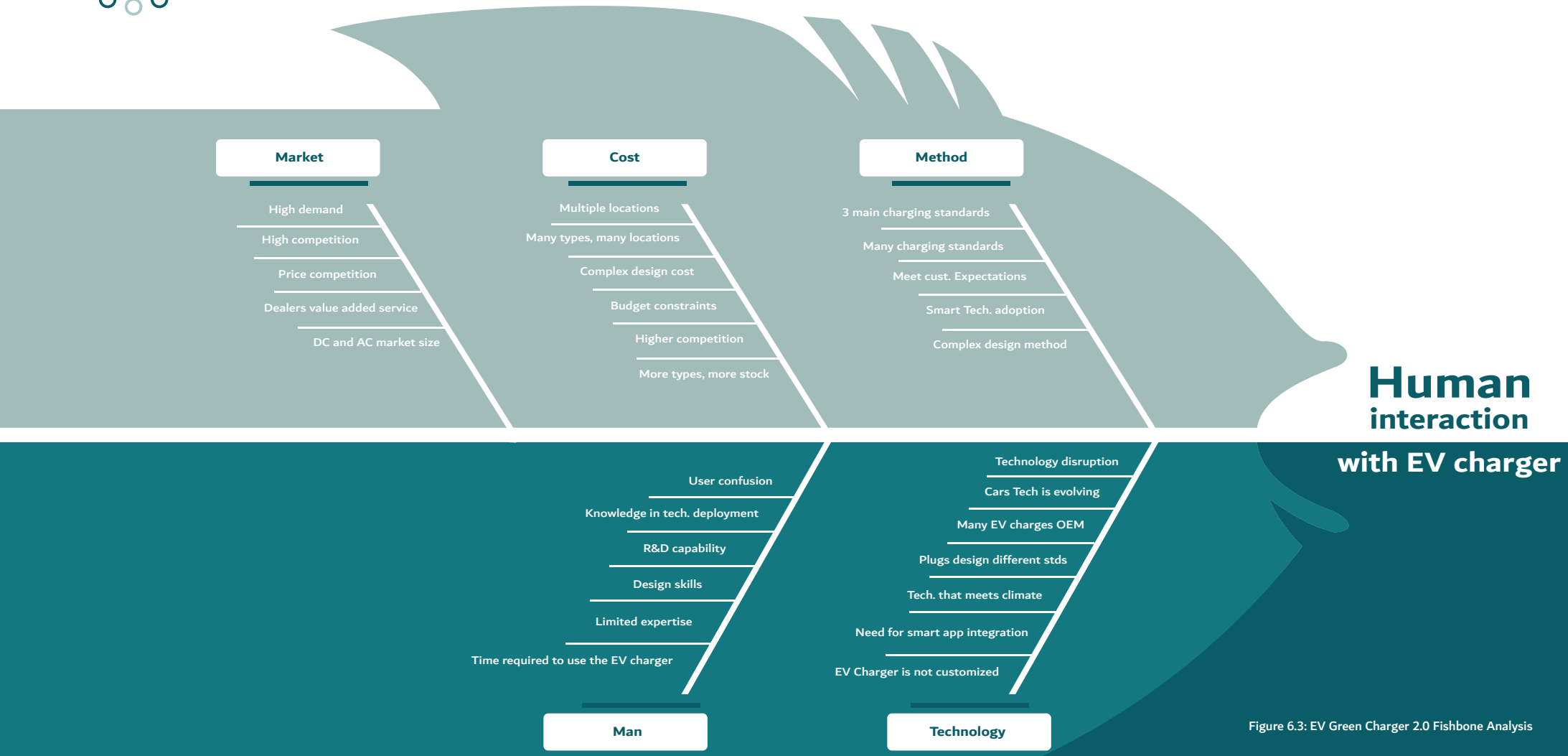
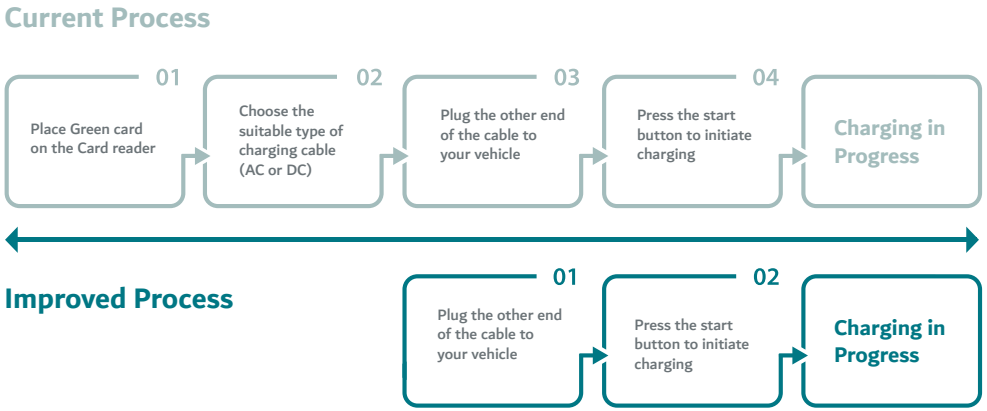


Figure 6.3: EV Green Charger 2.0 Fishbone Analysis

DEWA: EV Green Charger 2.0

6.2 Review



A range of performance measures were developed to monitor current performance and assess the success of the project including customer experience (charger ease of use), time required to begin charge cycle, reduction in interaction touch points, accuracy of technology, technology components' compliance to DEWA's standards and climate change, hacking incidents, no. of awareness campaigns regarding EV Charger 2.0, replacement cost of parts due to damage, average charger downtime due to error and number of complaints per EV registered car.

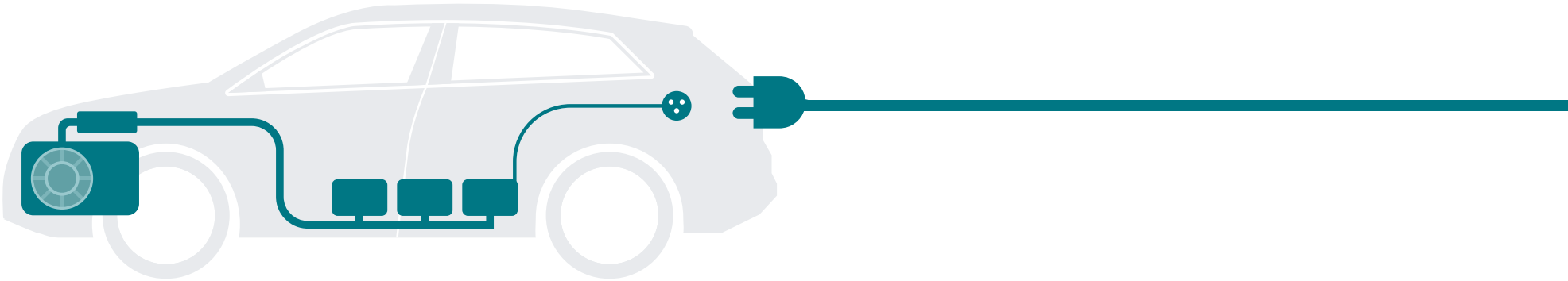


Figure 6.4: EV Green Charger process improvement for fast charging.

DEWA: EV Green Charger 2.0

6.3 Acquire

The Acquire stage began by identifying the criteria for undertaking benchmarking research. 29 desktop researches were conducted. This led to the identification of companies with whom 21 benchmarking meetings (video conferences and face-to- face meetings) were undertaken.

Benchmarking visits were conducted with the EV charger factories that manufacture rapid chargers. Visits were conducted to ABB (UAE-Netherlands-Italy), Motius (UAE), Circontrol (Spain), AKKA Technologies (UAE). The team discussed best practices and ideas for licence plate recognition embedded in the charger for customer identification, development of a unified cable solution, and other standards and technology related to fast chargers. Extensive notes and comparisons between the various partners was undertaken including invitations for proposals on how they could assist with DEWA's project.

Despite an intensive effort by the team to find a unified cable solution to simplify the charging experience it was found that this was not readily available in the market. Moreover, it was found that EV charger manufacturers were not keen in developing this type of solution as it was not part of their upcoming strategic plans.

However, the Acquire stage was invaluable in building the team's technical capabilities and understanding of standards and regulations – this enabled the team to decide to develop a solution in-house through its Research and Development Department.

Figure 6.5: DEWA's benchmarking visit to ABB.

DEWA: EV Green Charger 2.0

6.4 Deploy

The team decided that deployment would be carried out in three phases:

- **Phase I:**
  To develop a mock-up EV Green Charger that assists customers in selecting the most suitable cable and to showcase this at WETEX October 2019, undertake field-testing and obtain customer feedback by the end of November 2019.
- **Phase II:**
  To develop a full-scale prototype and test it in the field and sign-off on a business plan for EV Green Charger enhancements to improve customer experience by 1st December 2020.
- **Phase III:**
  To develop EV Green Charger 2.0 for rollout by December 2021.

DEWA: EV Green Charger 2.0

6.4 Deploy

PHASE I

Was successful in developing a 2-step charging cycle mock-up EV Green Charger in time for WETEX, 21-23 October 2019. It allowed the team to demonstrate the technology to delegates, guests, and other exhibitors (Figure 6.6). The mock-up charger included a license plate recognition system that identified the registered customer and their electric vehicle details (Figure 6.7). Once recognized, the charger identified the most suitable cable through illumination, eliminating cable confusion among customers (Figure 6.8). At this trial, end-user feedback and customer suggestions were captured through smart survey channels and to gauge public validation of the new design. Furthermore, to maximize the potential benefits, more mock-ups were planned during upcoming events and exhibitions.

Figure 6.7: License plate recognition system.

Figure 6.6: EV Green Charger mock-up at WETEX 2019.

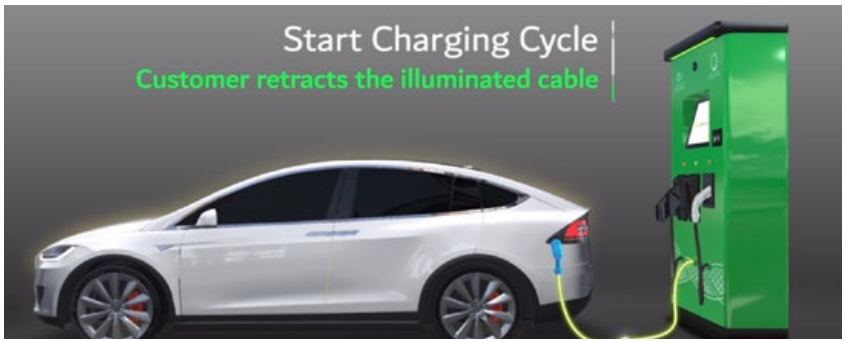


Figure 6.8: Selection of cable through illumination.

DEWA: EV Green Charger 2.0

6.4 Deploy

PHASE II (01 Jan 2020 – 31 Dec 2020)

Involves the development of a prototype with complete system specifications based on the outcomes from Phase I. This pilot is to be deployed for field testing on DEWA's EV charging network. Important considerations are environmental compliance, testing reliability, ease of prototype use, application for patents for the technology developed, and refinement ideas for the prototype design. During phase II, a unified cable solution will be planned in collaboration with international partners.

The charging socket and mode standards of EV charging station compatible for UAE and GCC region have already been finalised, this will be followed by awareness-raising in the GCC through scientific publications. Based on the UAE EV Cars Regulations Case Study review, implementation guidelines were prepared for the human-centric EV Green Charger. The benchmarking team is creating a database to assess market needs and network with suppliers, researchers, and consortiums.

PHASE III

This will involve manufacturing of the DEWA EV Green Charger 2.0 through outsourcing with EV charging manufacturers. In 2021, roll out of the charger will be conducted in phases across DEWA's EV charging infrastructure with partners ENOC and ADNOC petrol stations.

DEWA: EV Green Charger 2.0

6.5 Evaluate

Within one year the team had achieved the following:

- Reduced the number of steps in the charging process from 4 to 2 and achieved positive feedback on the mock-up from stakeholders.
- In-house technical design of the mock-up and manufacturing it through a third-party local company resulting in saving approximately AED 600,000 if the whole process had been outsourced.
- Developed the design specifications of the Phase II prototype and a plan for Phase III for full manufacture of the EV Green Charger.
- The team gained valuable experience in customer, supplier and benchmarking partner engagement.

An overall customer satisfaction rate of 99% was received from over 150 responses for the mock-up during WETEX 2019, the positive survey results were an indicator for the team to proceed with the interface.

The survey included three questions: Q1: Please rate your charging experience; Q2: Please rate the time required for cable selection of your vehicle; Q3: Overall satisfaction with the EV Green Charger (Figure 6.9).

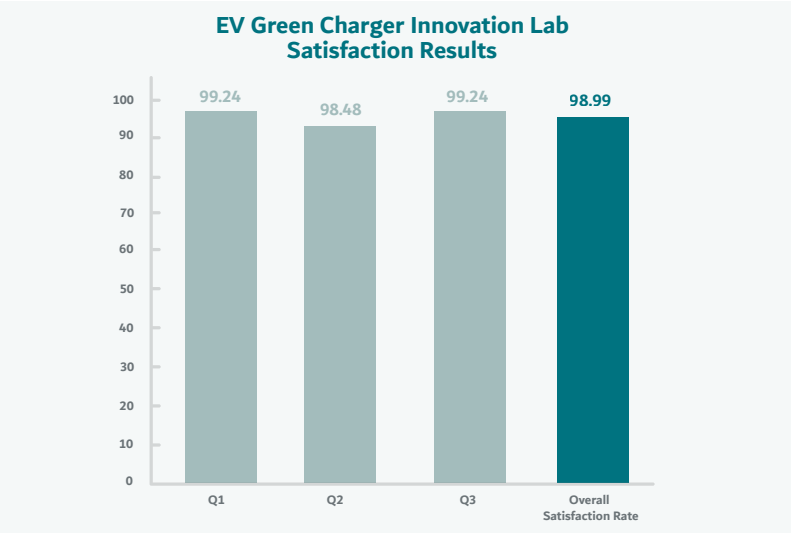


Figure 6.9: The graph summarizes the satisfaction rate for the individual questions and the overall satisfaction rate.

DEWA: EV Green Charger 2.0

6.5 Evaluate

In the future, enhancements to the EV charger will be supported by campaigns to increase the number of electric vehicles in Dubai. A reduction in charger downtime from 9% (Dec 2021) to 2% (Dec 2024) is expected. In addition, financial savings of AED 428,000 per annum is expected through increased utilization of the EV chargers (increasing revenue of AED 172,000 per annum), reduced need for contingency cables due to less human interaction saving AED 56,000 per annum, and a reduction in maintenance costs of AED 200,000 annually. This figure does not include financial benefits from any patents registered or from enhanced customer experience due to less time wasted in searching for the correct cable (Figure 6.10).

Figure 6.10: DEWA EV Green Charger 2.0 time saved per charging cycle.

Summary of project achievements of DEWA

Terms of Reference

Aim:

To develop a new user-friendly EV Green Charger which supports seamless customer experience by 2021 as an interim solution until the standardization of a single EV charging solution occurs.

Review

Situation analysis:

Currently, a globally recognised standardized solution is not available for electric vehicles with different EV charging sockets. Process mapping, fishbone and SWOT analysis, brainstorming sessions, and surveys revealed that the current EV Green Charger launched in Dubai in 2014 was not user-friendly. It received only a 73% satisfaction rate for 'customer experience in ease of EV charger use' (2018). The complex user interface with a four-step charging cycle leads to customer confusion and misuse which triggered the team to develop the concept for a faster 2-step charging cycle.

Acquire

- **Methods of learning:** Desktop research, site visits, phone calls, conference calls, brainstorming sessions.
- **Number of best practices identified via desktop research:** 76.
- **Number of site visits:** 4.
- **Number of organisations interviewed (by site visit or phone calls):** 9.
- **Names of organisations interviewed (by site visit) and countries:** ABB (UAE-Netherlands-Italy), Motius (UAE), Circontrol (Spain), AKKA Technologies (UAE).
- **Number of best practices identified via site visits:** 6.
- **Number of improvement ideas by the benchmarking team**: 13.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 99.
- **Number of best practices/improvements ideas recommended for implementation:** 10.

Summary of project achievements of DEWA

Deploy

- **Number of best practices/improvements approved for implementation:** 6.
- **Description of key best practices/improvements approved for implementation:** 1. Designed an EV Green Charger mock-up with license plate recognition system showcased at WETEX Oct 2019. 2. Charging socket and mode standards for EV charging station selected, compatible for UAE and GCC region and in alignment with human-centric capabilities. 3. Raising awareness in GCC for the selected charging mode and socket standards through scientific publications 4. Laid out implementation guidelines for the EV charger based on UAE's regulations. 5. Planned for Jan 2020-Dec 2020 a full-scale prototype of the EV charger for field testing with complete system specifications 6. Planned a unified cable solution to be developed in collaboration with international partners for rollout by Dec 2021.

Evaluate

- **Key achievement:**
  DEWA is taking the lead in developing a unified cable system, creating a niche in the international market in EV adoption, branding DEWA as a pioneer within the UAE and GCC in designing of a customised EV fast charger with smart solutions. A mock-up trial of the license plate recognition system for the EV Green Charger 2.0 at WETEX 2019 garnered an overall customer satisfaction rate of 99%. This project is expected to deliver financial benefits of AED 428,000 per year from increased revenues and savings in maintenance costs.

Non-financial benefits achieved within one year and expected future benefits:

Validation of the new interface concept and positive public feedback during the mock-up trial at WETEX 2019 with an overall customer satisfaction rate of 99% received from over 150 survey responses.
Developed design specifications for a prototype in 2020 and a plan for full manufacture in 2021.
Reduced the number of steps in the EV charging cycle from 4 to 2 steps with a user-friendly interface.
Time required to begin the charge cycle reduced from 120 secs to 30 secs.
A reduction in charger downtime from 9% (Dec 2021) to 2% (Dec 2024) for the fast charger 2.0 is expected.
Enhancements to the EV charger will support campaigns to increase the number of electric vehicles in Dubai.

Financial benefits achieved within one year and expected future benefits:

AED 600,000 saved from in-house technical design and third-party local manufacturing of the mock-up.
AED 428,000 is the estimated annual savings from increased revenues and reduced operational costs. This figure does not include financial benefits from patents registered or from enhanced customer experience due to time saved.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	01 February 2019	01 April 2019	30 June 2019	30 August 2019	02 November 2019
Finish (Phase I)	30 March 2019	30 June 2019	29 August 2019	29 October 2019	10 December 2019

*** Finish Date for all TRADE Stages of Phase II: 2020; Phase III: 2021**

Chapter 7

Dubai Health Authority

Dubai Heart Safe City

DHA: Dubai Heart Safe City

Dubai Health Authority (DHA)'s benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (5-6 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER). This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 7.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awards DHA's team 5-6 Stars TRADE Certification.

7.1 Terms of Reference

Background:

- **OHCA:** Out-of-Hospital-Cardiac-Arrest
- **CPR:** Cardio-Pulmonary Resuscitation
- **AED:** Automated External Defibrillator

Sudden cardiac arrest is the third leading cause of death in the world following cancer and heart disease. The Dubai Heart Safe City (DHSC) program was initiated in response to an annual increase of OHCAs in Dubai, leading to more disabled or lost lives, impacting the patients and their families. In 2018, Dubai recorded 1,300 OHCAs with an approximate 5% survival rate.

DHA: Dubai Heart Safe City

DHA identified that the critical 'chain of survival' (Figure 7.2) from awareness of cardiac arrest symptoms to definitive medical care at the right care facility needed to be improved to decrease mortality and morbidity from OHCA.

DHA were aware that Seattle and King County Washington (USA) and Copenhagen (Denmark) had the highest OHCA survival rates in the world at 65% and 67% respectively and were ambitious to achieve a similar level in Dubai.

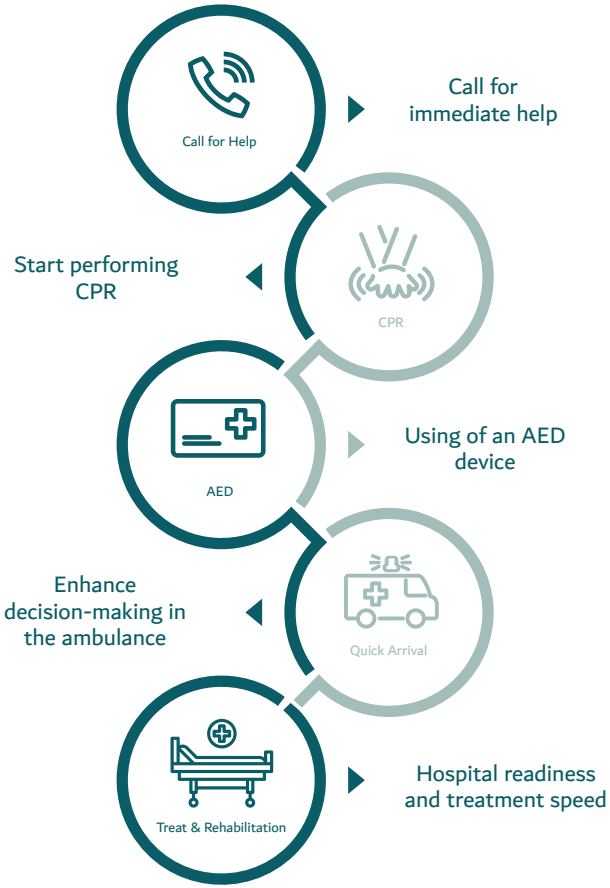


Figure 7.2: Out-of-hospital-cardiac-arrest chain of survival.

DHA: Dubai Heart Safe City

7.1 Terms of Reference

Project Aim:

To reach a survival rate of above 65% for OHCA incidents by 2025 in the Emirate of Dubai, saving approximately 800 lives per year; and to make Dubai *The Safest Heart City* in the world (Figure 7.3).

Any arrest incidents not diagnosed as sudden cardiac arrest, for example, respiratory, trauma; and paediatric sudden cardiac arrest cases were outside the scope of the project.

Figure 7.3: Dubai Heart Safe City – Aim and scope (The stated current OHCA Survival Rate of 5% is a global average).

DHA: Dubai Heart Safe City

7.2 Review

For the review stage, the team carried out a SWOT analysis, fishbone analysis, focus group meetings with key stakeholders, and reviewed previous research and data concerning OHCA in Dubai and the UAE.

This review highlighted a range of challenges including the need for:

- Greater awareness among the general population regarding OHCA.
- Reliable and relevant data. For example, data on OHCA and survival rates in Dubai and the UAE in general were not available or had not been consolidated except for a few studies, therefore OHCA survival rates was assumed to be at the 5% global average. OHCA data from the Northern Emirate for 2014-2015 gave a good understanding of OHCA contributing factors. Main findings were; low survival rate for out-of-hospital cardiac arrest, low rates of bystander cardiopulmonary resuscitation, and low public access to defibrillators.
- Clear legislation (such as a Good Samaritan Law in UAE) to legally protect voluntary heart savers
- A 'Training and Certified Heart Savers' national database of first-responders and a platform that will store an inventory of AEDs (an initial survey in July 2019 identified 338 AEDs installed across 20 government entities and 15,259 people CPR trained).
- Protocols for telephone CPR.
- Innovation, technology and digitization in the use of AEDs.
- Regulations to enable AED installation and registration with the national database for new constructions.

DHA: Dubai Heart Safe City

7.2 Review

Of most importance was the need for a unified approach involving all key stakeholders with clear accountabilities and coordination processes in place. To achieve this, DHA identified over 20 stakeholders that could assist with the project and the role that they could play.

The benchmarking team extracted data for the monthly trend of ventilator usage and the costs thereof for the OHCA patients at DHA's Rashid Hospital (Figure 7.4). This showed that there is a significant financial cost on the healthcare system as well as the physical and emotional trauma on the patients and families affected.

The team identified the key risk factors for OHCA from the data at DHA's Rashid Hospital (Figure 7.5) indicating that people who had already an existing heart condition (ischemic heart disease), dyslipidaemia, smoking or family history of cardiac problems were most at risk. This was important to know so that targeted strategies for high risk groups could be developed.

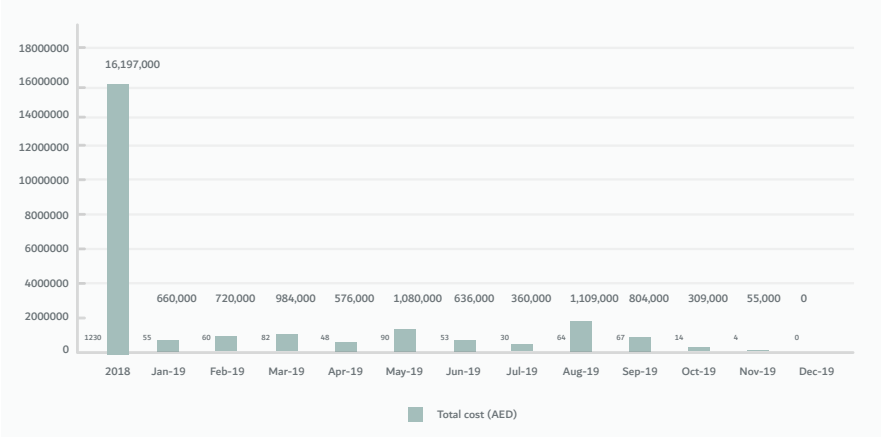


Figure 7.4: Total in-patient ventilator days and total ventilator costs (AED) incurred in 2018 and 2019 at Rashid Hospital.

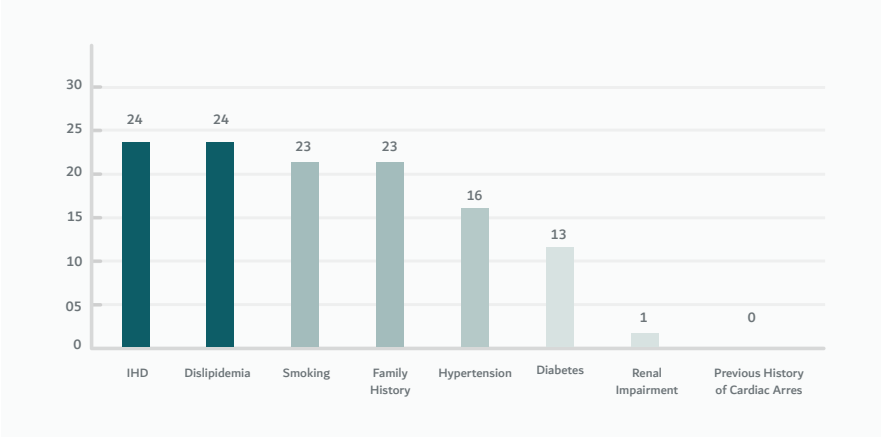


Figure 7.5: Risk factor for OHCA in 2018 and 2019 at Rashid Hospital.

DHA: Dubai Heart Safe City

7.2 Review

The benchmarking team recognised that moving forward it was imperative that accurate and timely OHCA related data was required. 23 performance measures were identified as important with many of them listed in Figure 7.6.

Unfortunately, most of this data was not available as it was held in different hospitals or government departments and it would require a coordinated approach to develop a unified OHCA reporting system.

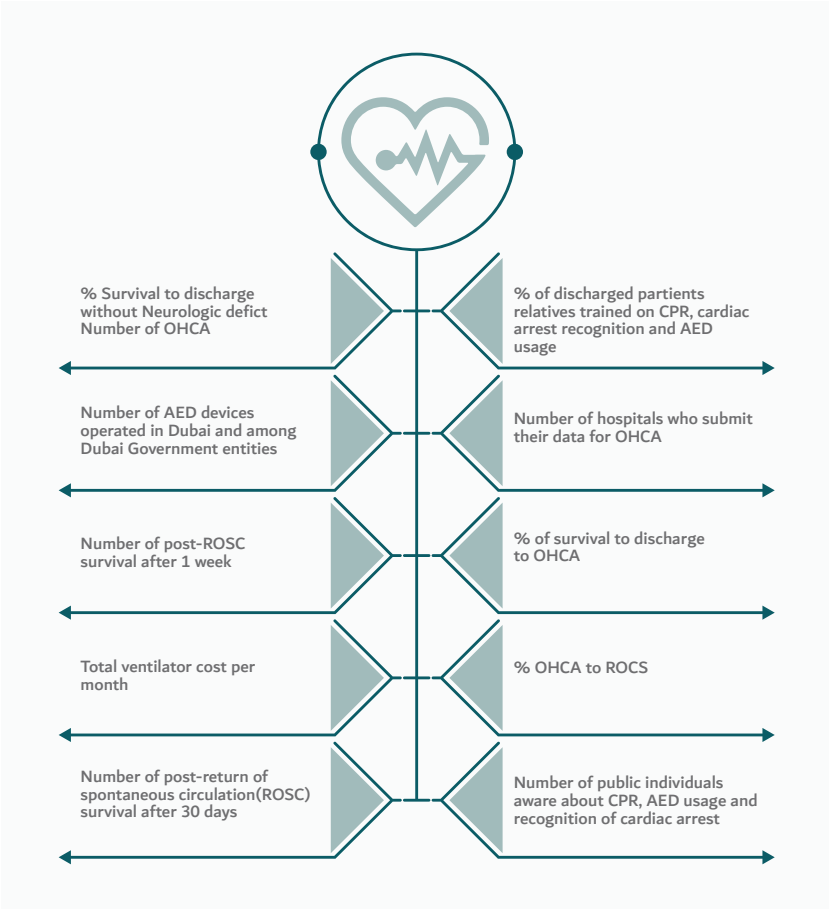


Figure 7.6: Identified KPIs.

DHA: Dubai Heart Safe City

7.3 Acquire

The team conducted vigorous desktop research to learn about global best practices in OHCA management systems with 118 best practices identified from this method alone. As Seattle and King County Washington (USA) and Copenhagen (Denmark) had the highest OHCA survival rate in the world (65% and 67% respectively), the DHA benchmarking team studied their approach in detail which revealed the key involvement of stakeholders with clear aligned roles.

The 10 steps and 10 programs approach of the Resuscitation Academy (USA) particularly impressed the team. Through studying the Resuscitation Council (UK) the team learnt the fundamental elements of building an OHCA Registry. The desktop research conducted by the COER team on behalf of DHA revealed the best practice of 'Multisensory Multilevel Health Education Model for Diverse Communities' for an enhanced approach towards creating public awareness.

Several formal benchmarking visits were undertaken. The DHA team learnt from the international leader in OHCA management, the American Heart Association (UAE office) (Figure 7.7), which shared the different training techniques that can support training high volumes of people in a limited period (for example, online training and train the trainers program).

Figure 7.7: DHA Team at the American Heart Association (UAE Office) during one of the brainstorming sessions.

DHA: Dubai Heart Safe City

7.3 Acquire

From the visit to the CPR Network, Netherlands, (Figure 7.8), the benchmarking team gained knowledge about the integrated information system for all the government entities under one system, mandatory CPR and AED usage training for Grade 12 students in all schools, deployment of 8000 public AEDs in the Netherlands, the value of educating the general population in early detection of cardiac arrest and CPR and AED usage and learnt about CPR Network's partnership with Volvo to launch the safest cars in the world by adding GPS system application and AED in their cars.

Figure 7.8: DHA Team during the Amsterdam benchmarking visit to CPR Network (Netherlands).

At the Directorate General of Dubai Civil Defense, the idea of embedding AED distribution guidelines the same as for the fire protection systems as a prerequisite for passing the inspection procedure for all new construction projects was a chief input. The team also held meetings with the Dubai Corporation for Ambulance Services (DCAS) and proposed to start training and AED placement efforts within "high risk" geographical areas based on the information collected by DCAS in the past two years.

DHA: Dubai Heart Safe City

7.4 Deploy

The first major deployment activity was to form a project steering committee to strengthen the relationship with stakeholders that were important to the success of the project – the committee consisted of representatives from eleven government entities.

Based on the Acquire stage learnings and recommendations, the key deliverables were developed into two roadmaps and signed on 15 Dec 2019; short-term phase (2019-2020) (Figure 7.9), and long-term phase (2021-2025).

Figure 7.9: Dubai Heart Safe City short-term phase roadmap (2019 – 2020).

DHA: Dubai Heart Safe City

7.4 Deploy

The following is in progress:

- An OHCA registry is being developed with the motto "You can't improve what you don't count". This will enable the team to calculate the current survival rate across Dubai. A proposal has been submitted for approval to the Dubai Scientific Research Ethics Committee to ensure OHCA data protection, data collection and storage. The registry is being integrated within DHA's SALAMA (EMR) system; for private healthcare entities, plans are in progress for alignment with the DHA system.

- The aim is to have 10% of staff from all Dubai Government entities trained as heart savers. To start off, the benchmarking team have increased the level of CPR and AED training provided by Rashid Hospital. Family members of discharged cardiology ward patients are being trained as these patients are at a high risk of a further cardiac arrest.

Figure 7.10: Public awareness and training sessions in CPR and AED usage conducted at Rashid Hospital, DHA.

- One of the project objectives is to establish a platform that will store a live inventory of heart savers and AEDs. A major milestone that will kick off AED access and availability will be the steering committee's direction on the financing strategy of choice, procurement management, and lifetime management.

- A new penal code and criminal procedural code removes liability for those coming to the aid of someone. Therefore, "any person who's committing an act out of good intention that may end up hurting that person will not be punished". The new code will be promoted by DHA to encourage more "Heart Savers" for OHCA patients and support Emirate of Dubai in increasing the survival rate.

Other best practices that have been agreed in principle but are still in the planning stage are; protocols for telephone CPR, Dubai population awareness program, develop clinical pathways, facilitate the integration of care providers within the project, install AEDs at all mosques in Dubai and develop specific actions targeting "at risk" groups within the Dubai population.

DHA: Dubai Heart Safe City

7.5 Evaluate

The DHA benchmarking team's prime achievement has been the development of a short-term roadmap (2019 – 2020) and long-term roadmap (2021-2025) with an expectation it will help to save approximately 800 lives per year through achieving a 65% or greater survival rate from OHCA once it is fully deployed. The following outcomes have been achieved so far:

- To build the OHCA registry, the team began to collect the OHCA historical data (2018 – 2019) from the hospitals in Dubai (public and private) with 11 of the 43 hospitals submitting their records. From Jan 2020, all mapped healthcare facilities are now required to provide the monthly log of their OHCA cases as per the recently developed OHCA registry form. By Q1-2020 DHA intend to declare Dubai's OHCA survival rate.
- From August 2019 to December 2019, through the Dubai Heart Safe City public awareness campaign conducted at Rashid Hospital, 919 people have been trained in CPR and AED usage (Figure 7.11). In addition, 709 members of the public have been trained through training programs offered at DHA's headquarters, the Bangladesh Consulate, Dubai Hospital, and labour camps at Dubai Investment City and Dulso.

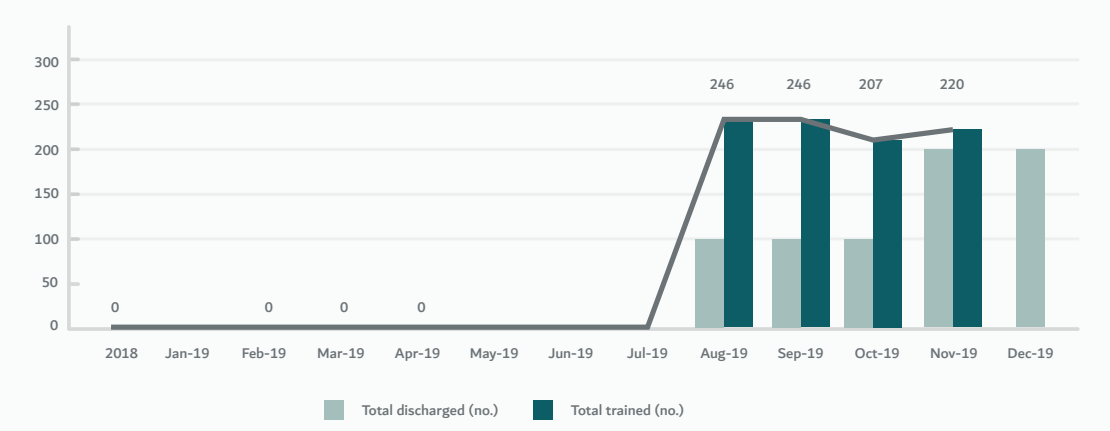


Figure 7.11: Public awareness and training on CPR and AED usage within Rashid Hospital, DHA.

DHA: Dubai Heart Safe City

7.5 Evaluate

- The benchmarking project led to a major increase in spreading awareness among relatives/first responders of at-risk groups. Starting from August 2019 to December 2019, of the 445 patients discharged from the Cardiology Unit at Rashid Hospital, 413 family members received training on cardiac arrest recognition, CPR, and AED usage, achieving a successful training rate of 93% against a goal of 80%.

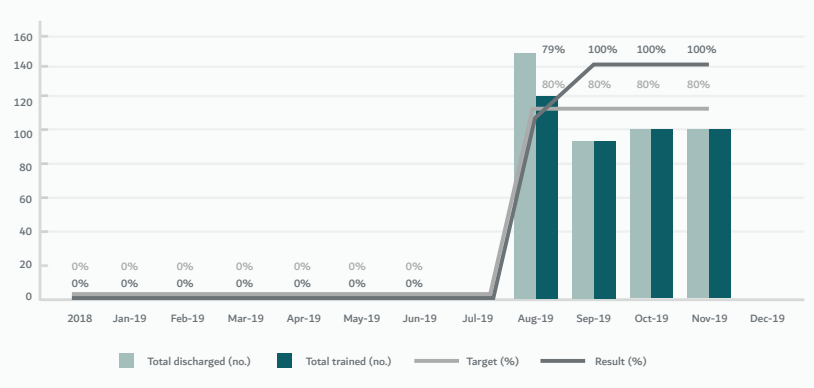


Figure 7.12: Percentage of discharged patients' relatives from Rashid Hospitals' cardiology unit who were trained for CPR , cardiac arrest recognition and AED usage.

- For core stakeholder involvement and participation, the DHA benchmarking team held DHSC project meetings with 60% of the 20 targeted government entities to receive their feedback, with suggestions and action-plans to maximize the smooth execution of the short-term and long-term project goals. In addition, the project steering committee representing 11 government entities was approved and announced in December 2019.

Financially, the project is expected to save approximately AED 40 million for the health service by 2025 through reducing the number of patients requiring short and long-term care. Annual cost savings will be approximately AED 10 million if a survival rate of 65% is achieved in comparison to today's rate of approximately 5%. Additionally, there will be indirect savings expected from patients with better OHCA clinical outcomes and recovery rates, less work absenteeism, and optimum performance at work as a result of timely intervention with an integrated emergency management system.

Summary of project achievements of Dubai Health Authority

Terms of Reference

Aim:

Aim: To reach a survival rate of above 65% for Out of Hospital Sudden Cardiac Arrest (OHCA) incidents by 2025 in the Emirate of Dubai, saving approximately 800 lives per year; and to make Dubai The Safest Heart City in the world.

Review

Situation analysis:

In 2018, Dubai had 1300 OHCA cases and an estimated survival rate of 5% (based on the global average). After extensive stakeholder engagement, data analysis, SWOT and fishbone analysis the team identified a number of challenges such as the need for a Dubai-wide OHCA registry, protocols for telephone CPR, greater public awareness of OHCA with more people trained in CPR and AED usage, clear legislation that offers legal protection to voluntary heart savers, and the need for more AED installations (there were 338 AEDs installed across 20 Dubai Government entities in 2019).

Acquire

- **Methods of learning:** Desktop research, site visits, phone calls, brainstorming sessions.
- **Number of best practices identified via desktop research:** 118.
- **Number of site visits:** 5.
- **Number of organisations interviewed (by site visit or phone calls):** 6.
- **Names of organisations interviewed (by site visit) and countries:** CPR Network (Netherlands), American Heart Association (UAE office), Directorate General of Dubai Civil Defense (UAE), Dubai Corporation for Ambulance Services (UAE), and Dubai Sports Council (UAE).
- **Number of best practices identified via site visits:** 21.
- **Number of improvement ideas by the benchmarking team**: 29.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 168.
- **Number of best practices/improvements ideas recommended for implementation:** 10.

Summary of project achievements of Dubai Health Authority

Deploy

- **Number of best practices/improvements approved for implementation:** 10.
- **Description of key best practices/improvements approved for implementation:** On 15 Dec 2019, two roadmaps were signed off for implementation. With the short-term roadmap (2019-2020), 50,000 heart savers are to be trained with certifications and 3,000 AEDs to be installed with a telephone CPR and AED maintenance plan. For the long-term roadmap (2021-2025) 100,000 people will receive training in CPR and AED, and 10,000 AED devices installed with 50 connected ambulances and 10 care facilities. Since Aug 2019, several awareness and training campaigns in OHCA, CPR, and AED usage have been conducted, and at Rashid Hospital twice a week since Nov 2019. The creation of an OHCA registry is in progress. A Heart-Savers' Guidelines During Resuscitation for OHCA is being drafted for the protection and safety of voluntary first responders. The Expo 2021 "Heart Safe Zone" pilot program will be commissioned with trained heart savers, installed AEDs, and aims to have zero deaths due to OHCA.

Evaluate

- **Key achievement:** Development and initial deployment of a short-term roadmap (2019 – 2020) and long-term roadmap (2021-2025) with an expectation that when fully deployed approximately 800 per lives per annum will be saved through achieving a 65% or greater survival rate from OHCA. With limited OHCA data published in the Gulf region and Dubai, the commissioning of the Dubai Heart Safe City project has led to OHCA baseline data being collected and the development of an OHCA registry. From Aug 2019 till Dec 2019, 2041 people were trained in CPR and AED usage in an ongoing public campaign for an efficient 'chain of survival'.

Non-financial benefits achieved within one year and expected future benefits:
Development and initial deployment of a short-term roadmap (2019 – 2020) and long-term roadmap (2021-2025).
Wide stakeholder engagement with a project steering committee formed representing 11 government entities.
From July 2019 to Dec 2019, 11 hospitals (public and private) out of 43 hospitals submitted their OHCA historical data to the OHCA registry.
By Q1-2020 DHA intend to declare Dubai's OHCA survival rate based on the collected baseline data so far.
From Aug 2019 to Dec 2019 the general public were trained in cardiac arrest recognition, CPR and AED usage: at Rashid Hospital 919 people (target – 700, success rate 131%), 413 family members trained of 445 patients discharged from the Cardiology Unit (target 80%, success rate 93%), other health care facilities 709 people (target – 600, success rate 118%).

Financial benefits achieved within one year and expected future benefits:
The project is expected to save approximately AED 40 million for the health service by 2025 through reducing the number of patients requiring short and long-term care.
Annual cost savings will be approximately AED 10 million if a survival rate of 65% is achieved in comparison to today's rate of approximately 5%.
Indirect savings expected due to better OHCA clinical outcomes and recovery rates, less work absenteeism, and optimum performance at work as a result of timely intervention with an integrated emergency management system.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	20 Feb 2019	26 Feb 2019	April 2019	(Short term) May 2019 / (Long term) Mar 2021	(ST) Oct 2019 / (LT) Oct 2021
Finish	17 March 2019	17 March 2019	30 June 2019	(Short term) Dec 2020 / (Long term) Oct 2025	(ST) Dec 2019 / (LT) Dec 2025

Chapter

8

Dubai Land Department

Smart Property Valuation

DLD: Smart Property Valuation

Dubai Land Department (DLD)'s benchmarking team was awarded TRADE Benchmarking Proficiency (3-4 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organisational Excellence Research (COER). At the time of certification DLD had not completed its project, however it was subsequently completed with the launch of its smart valuation system for property units in September 2020. This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 8.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awards DLD's team 3-4 Stars TRADE certification.

8.1 Terms of Reference

Background:

DLD were established in January 1960 to protect the real estate rights of all stakeholders and regulate the real estate market in Dubai. The benchmarking project focused on DLD's property valuation service as it is one of its vital real estate registration services. The Dubai market relies on valuation data to support investments and mergers as well as acquisition activities; underpin financial reporting; determine the capital adequacy of financial institutions, helping de-risk markets; and to foster financial stability. The valuation certificate, which is issued by a valuation committee serves many purposes, such as sales, mortgages, and gifting, among other Dubai government procedures.

DLD receives an average 9,000 valuation transactions annually, of which 3,279 are valuations for units. Because the process is highly reliant on human involvement, the service was not only time-consuming for the valuation certificate to be generated, but the documents could be duplicated or misplaced, and there could be property information errors, all of which could lead to more delays and frustration for customers.

DLD: Smart Property Valuation

8.1 Terms of Reference

Background:

Therefore, the objective of the smart valuation initiative, considered to be the first in the international real estate market, was to improve the current unit valuation service with higher levels of customer satisfaction by:

- Reducing service times from days to a few seconds.
- Eliminating most of the required documents through the integration of local databases and external systems.
- Eliminating the process of auditing, valuation committee meetings, and courier delivery of the valuation certificate.

Land and building valuations were outside the scope of the benchmarking project.

Project Aim:

To provide an instant, reliable, and robust unit-valuation service.

DLD: Smart Property Valuation

8.2 Review

During the Review stage, the DLD benchmarking team analysed the cycle time of processing a valuation to see if it could be reduced from three days. The valuation certificate is issued by a valuation committee, comprising a group of real estate experts who meet physically twice a week to agree on the valuation; refer to Figure 8.2. The customer has the right to file for an appeal if the issued certificate valuation is not as per their expectations.

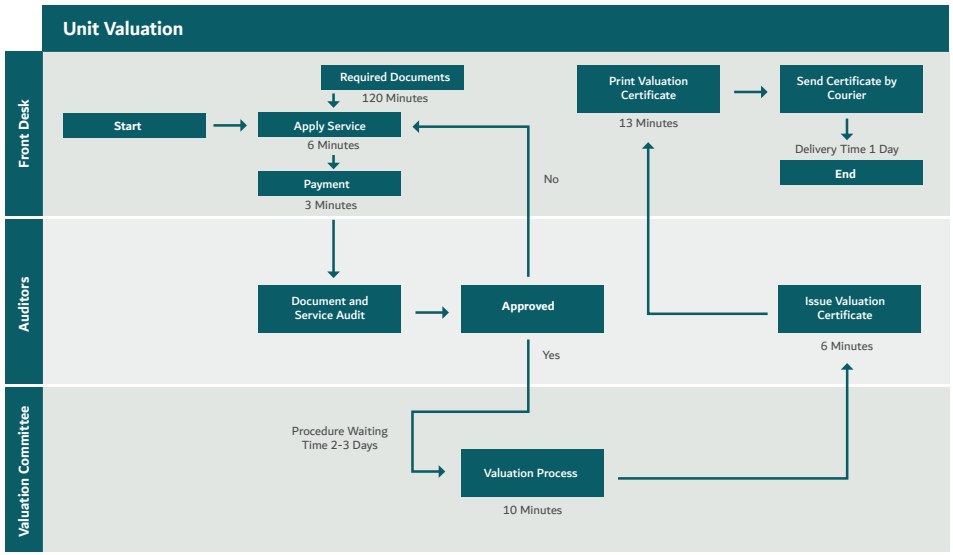


Figure 8.2: A property unit's valuation process.

To investigate the issue further, fishbone analysis (Figure 8.3) was undertaken and delays to the process were broken down into human error, data issues (such as the need for data cleansing to rectify recording errors), and process challenges. SWOT analysis (Figure 8.4) identified weaknesses, such as site visits required to the requested valuation unit, no clear standards for the valuation process, high-service costs compared to the service fee, and excessive documentation that needed to be submitted. The main opportunities identified were technological breakthroughs in artificial intelligence (AI) and machine learning (ML) as well as the availability of historical data of properties and their prices, and authorised open-source data such as Dubai Pulse or Bayanat.

DLD: Smart Property Valuation

8.2 Review

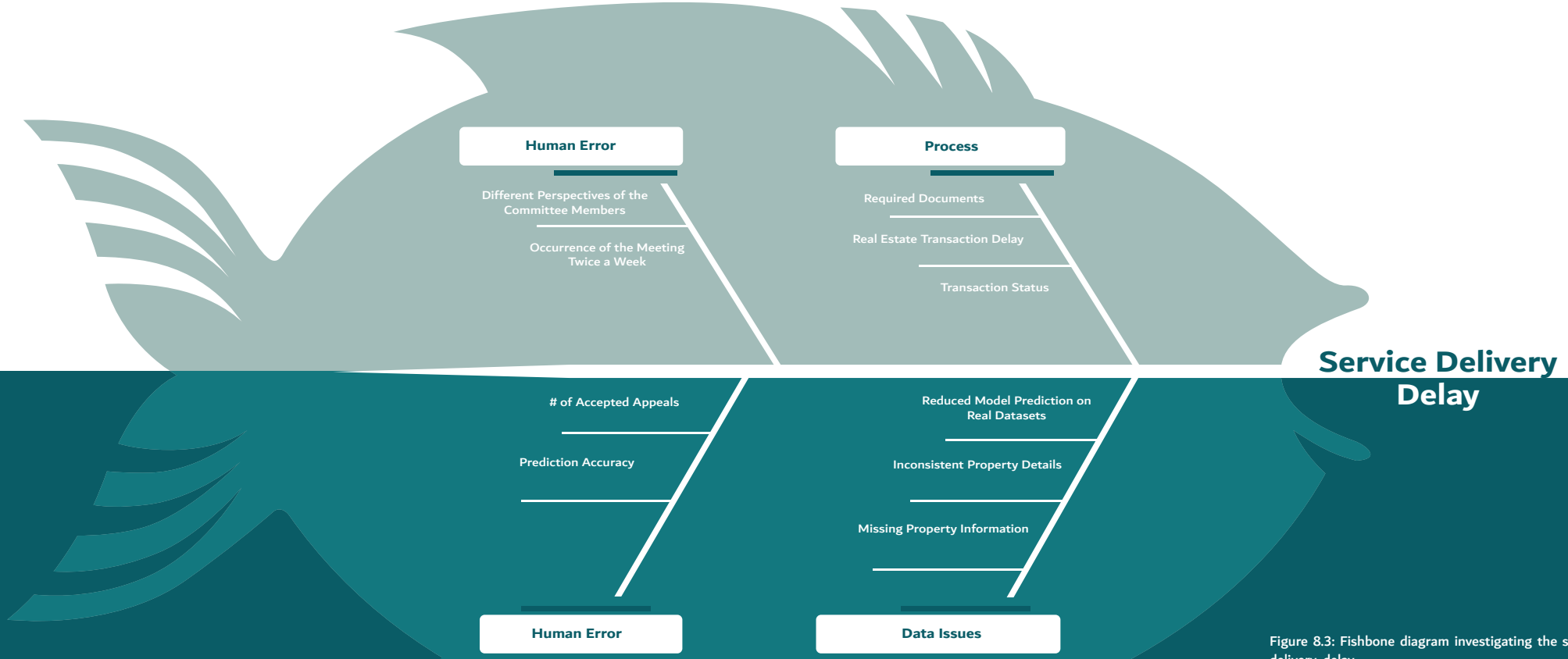
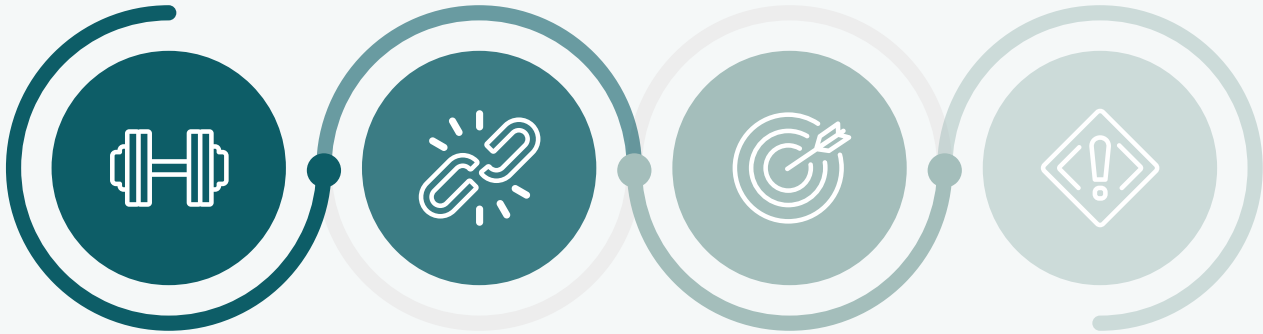


Figure 8.3: Fishbone diagram investigating the service delivery delay

DLD: Smart Property Valuation

8.2 Review



STRENGTHS

- Members of the committee are specialized experts in real estate valuation.
- Technically capable staff.
- Strong database with almost 85% accuracy.
- Dependency of other important internal and external services on valuation.

WEAKNESSES

- Site visits to requested valuated units.
- No clear standards for valuation process.
- Time consumed to complete valuation procedure.
- High service cost compared with the service fee.
- Too many needed documents.

OPPORTUNITIES

- Supported by dubai smart government.
- Availability of open data.
- The technological breakthrough in Ai and Machine Learning.

THREATS

- Effect of financial crisis on real estate market.
- Although open data is available, yet it may not be sufficient or accessible.
- External valuation companies.

Figure 8.4: SWOT analysis.

DLD: Smart Property Valuation

8.2 Review

It was at this point in the investigation that the team realised the benefits that a smart valuation system would bring, especially when considering the millions of transactions based on property type and neighbourhood that could be quickly and accurately processed to generate a valuation. However, through gap analysis, the team realised that DLD's lack of experience in implementing AI combined with few vendors with experience in building AI for real estate property valuation were major technical challenges. Therefore, the Acquire stage of TRADE would be used to identify best practices in AI and appropriate partners that could assist DLD in developing a smart valuation system.

The team identified DLD's current performance and set targets for its ambitious project. The four main objectives were:

- Reduce the valuation process cycle time from three days to 15 seconds.
- Reduce the service valuation cost by 40%.
- Increase customer satisfaction from 91% to 94%.
- Achieve AI prediction accuracy of at least 85%.

Other objectives were set for reducing the number of valuation committee meetings, reducing the average time for customers to submit a unit valuation request, reducing the average number of phone calls per month received by the front desk concerning valuations, and increasing the percentage of applications received through Dubai REST, DLD's real estate platform for property owners, tenants, real estate brokers, developers, real estate valuators, and investors that can be downloaded from the App Store or Google Play.

DLD: Smart Property Valuation

8.3 Acquire

To begin the benchmarking process, the team selected potential partners based on the best-practices search criteria shown in Figure 8.5.

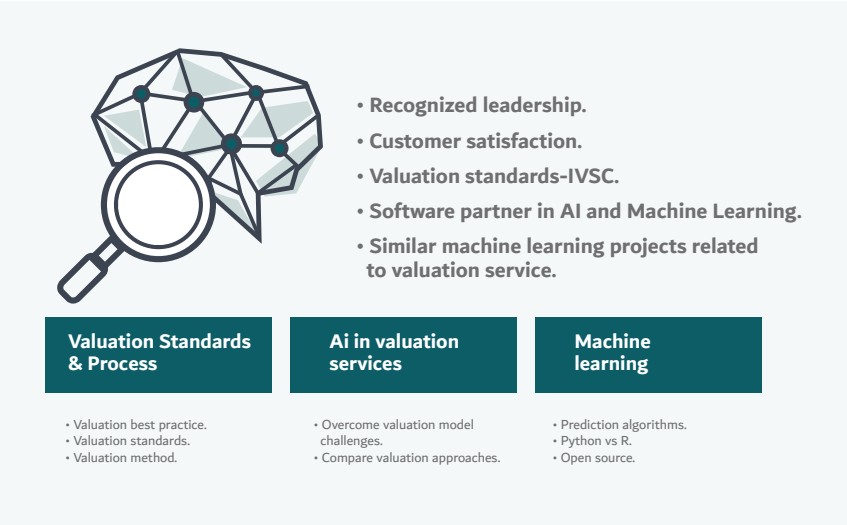


Figure 8.5: DLD best-practices search criteria for the Acquire stage.

Because the initiative was the first-ever in the world, with no reference point in the field of property valuation services — whether from the public or private sector, the benchmarking team relied on cross-industry best practices related to valuation.

For example, the team decided to learn from car-valuation companies, leaders in artificial intelligence — Crayon (Singapore), and from Dubai Airports, with several successful projects using AI and ML. In addition, the team were interested in best practices for valuation standards and international regulations.

DLD: Smart Property Valuation

8.3 Acquire

Site visits were undertaken to CBRE (UAE office) (Figure 8.6); the Royal Institution of Chartered Surveyors (RICS), UK; Morgan Stanley Capital Index (MSCI), USA (Figure 8.7); and the International Valuation Standards Council (IVSC), UK. Finally, as New Zealand was ranked as the leading country in real estate registration according to the Ease of Doing Business Report, the New Zealand Registration Authority Agent was selected for benchmarking collaboration via a conference call.

Figure 8.6: Benchmarking visit to CBRE office, Dubai.

Figure 8.7: Benchmarking visit to MSCI, United States.

Questionnaires were prepared for the site visits, which provided useful insights into new trends in developing AI and ML modules that could be adopted. From the benchmarking visit to Crayon, the team discovered that using open-source libraries, like Python and R, are more efficient, with project cost savings of approximately 35% in comparison to AI-ready platforms. The team visited IVSC and found that three new valuation criteria had been added to the international valuation standards that would increase valuation accuracy. At MSCI, the team learnt about real estate price indices for property markets. Many improvement ideas were also suggested by team members, the project sponsor, and stakeholders during the internal brainstorming sessions.

DLD: Smart Property Valuation

8.4 Deploy

The benchmarking team recommended 11 best practices for implementation, of which eight were approved, including using AI to clean data and detect data anomalies; using a machine learning open-source library over commercial software; providing smart valuation services using a web application programming interface; increasing registrations for non-Emirati ID holders on Dubai REST; and incorporating three new valuation criteria aligned with international valuation standards.

The steps to conduct the valuation are handled through Dubai REST, starting with establishing the type of user, determining the means of entry, submitting the ID number, and receiving a letter containing the verification number. Once all the data of the owner and that of the owned real estate appears, the user selects the property to be valued for its data to be displayed. After that, all the required documents must be submitted, and the fees paid through the Noqodi wallet — with a confirmation of the payment generated. The process ends with the delivery of the valuation certificate directly to the client. A master plan for implementation was developed consisting of key milestones, refer to Figure 8.8; of importance was the selection of Crayon to develop the smart valuation system.

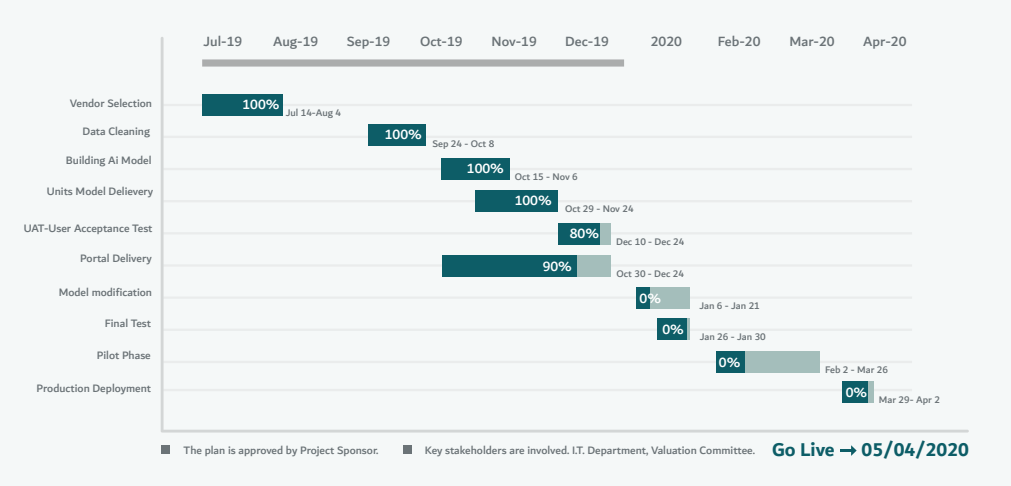


Figure 8.8: DLD project master plan with milestones (2019-2020).

DLD: Smart Property Valuation

8.5 Evaluate

The smart valuation was soft-launched and used internally in April 2020. Due to COVID-19 and as it needed some fine tuning, it was officially unveiled to the public in September 2020. During the development and the user acceptance testing, it was observed that the AI-supported, data-cleansing approach was very effective in improving data accuracy to 95% and 85% in AI valuation. The programme is expected to impart a significant positive impact on the real estate market through increasing valuation accuracy and speed of valuation that would raise investors' trust in Dubai's real estate investments. In addition, a financial saving of more than an annual AED 3 million is expected by reducing the valuation services cost by 40% from AED 2,334 to AED 1,400 per unit-valuation request.

Figure 8.9a: Launch of the smart valuation system in September 2020.

Figure 8.9b: Launch of the smart valuation system in September 2020.

Figure 8.9c: Launch of the smart valuation system in September 2020.

DLD: Smart Property Valuation

8.5 Evaluate

In terms of the team's achievements, His Excellency Sultan Butti bin Mejren, Director General of Dubai Land Department, said: "DLD is continuously seeking to strengthen Dubai's leading position as a vital model for smart cities in the world through teamwork with various departments and constructive cooperation as well as through the foundational structure of a smart city, where one may practise the ease of doing business. We believe that this pioneering smart project will help us raise our ranking on global performance indexes in terms of providing the best valuation services to our customers, at high speeds and with complete transparency. This is made more evident since our cadres are now highly qualified and trained to deal with these technologies as well as provide the best applications that can be easily dealt with."

Figure 8.10:
His Excellency Sultan Butti bin Mejren, Director General of DLD.

Majid Saqr Al Marri, CEO of the Registration and Real Estate Services Sector at DLD and project sponsor, described the service as a major development for providing quality services with a high level of performance to ensure customer comfort and happiness. He added: "The benchmarking team has worked with Crayon to achieve a smart valuation of real estate units and provide an immediate, reliable and robust service. As a result, real estate units will be valued without the need for most of the required documents through the interconnection of local databases and external systems, using an advanced model of artificial intelligence, based on accurate algorithms to analyse millions of transactions and data with extreme accuracy."

Figure 8.11:
Majid Saqr Al Marri, CEO of the Registration and Real Estate Services Sector at DLD.

Summary of project achievements of Dubai Land Department

Terms of Reference

Aim:

To provide an instant, reliable, and robust unit valuation service.

Review

Situation analysis:

DLD provides approximately 3,300-unit valuations per annum. On average it takes 3 days for a valuation certificate to be issued as the process is highly reliant on human involvement. Fishbone analysis identified challenges with the current system such as different opinions of the valuation committee members, no clear standards for the valuation process, the documents can be duplicated or misplaced, and there could be property information errors, all of which could lead to delays and frustration for the customer. Through undertaking a SWOT analysis, the team realised that a smart evaluation system utilising artificial intelligence with machine learning would enable millions of transactions based on the property type and the neighbourhood to be quickly and accurately analysed to generate an accurate valuation. An ambitious target of 15 seconds for a valuation was set.

Acquire

- **Methods of learning:** Desktop research, site visits, conference calls.
- **Number of best practices identified via desktop research:** 30.
- **Number of site visits:** 6.
- **Number of organisations interviewed (by site visit or phone calls):** 7.
- **Names of organisations interviewed (by site visit) and countries:** Dubai Airports (UAE), CBRE (UAE office), Crayon (Singapore), Royal Institution of Chartered Surveyors (UK), International Valuation Standards Council (UK), Morgan Stanley Capital Index (USA).
- **Number of best practices identified via site visits:** 10.
- **Number of improvement ideas by the benchmarking team:** 12.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 52.
- **Number of best practices/improvements ideas recommended for implementation:** 11.

Summary of project achievements of Dubai Land Department

Deploy

- **Number of best practices/improvements approved for implementation:** 8.
- **Description of key best practices/improvements approved for implementation:** A Master Plan (2019-2020) was developed in collaboration with Crayon as the benchmarking team's official partner to work on the technical development of the smart property valuation system. The best practices approved for implementation included: using AI to detect clean data and data anomalies, using machine learning open source library over commercial software, using a web application programming interface, registration for Non-Emirates ID holder in Dubai REST (the real estate platform for providing the smart valuations) and incorporating three new valuation criteria aligned to international valuation standards.

Evaluate

- **Key achievement:**
  The smart property valuation system is the first in the international real estate market. The development of a predictive model based on artificial intelligence and machine learning will generate a valuation certificate in 15 secs instead of 3 days. The new model has been designed incorporating the approved real estate valuation standards and global regulations and was launched in September 2020. It is expected that the project will result in a 40% (AED 3 million) reduction in the annual cost of the valuation service.

Non-financial benefits achieved within one year and expected future benefits:
Developed a smart property valuation system, launched in September 2020.
Effective AI-supported data cleansing approach and user acceptance test with improved data accuracy to 95% and AI prediction accuracy of 85%.
Expected reduction in valuation processing time from 3 days to 15 seconds.
Expected increase in customer satisfaction from 91% (2018) to 94% (2020).

Financial benefits achieved within one year and expected future benefits:
Expected saving of more than AED 3 million annually by reducing the valuation service cost by 40% from AED 2,334 to AED 1,400 per unit valuation request.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	17 February 2019	02 June 2019	01 August 2019	08 December 2019	1 September 2020
Finish	16 May 2019	07 October 2019	27 November 2019	1 September 2020	1 January 2021

Chapter

9

Dubai Municipality

Digital Transformation of Contracts

DM: Digital Transformation of Contracts

Dubai Municipality's benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (7 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER). This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 9.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awards DM's team 7 Stars TRADE certification.

9.1 Terms of Reference

Background:

The Emirate of Dubai is seeking to transform itself into a smart city using state-of-the-art digital and smart systems in all its government services. Dubai Municipality is one of the vital enabling and operational departments of Dubai, providing supportive infrastructure and resources for the citizens of Dubai. Aligning with the Strategic Plan of Dubai 2021 to create a pioneering government, the Contracts and Purchase Department is striving to provide smart and sustainable services in procurement.

Figure 9.2: Expected impact of the project.

DM: Digital Transformation of Contracts

9.1 Terms of Reference

Background:

The underlying drivers for this benchmarking project were manifold. Reviews, feedback, and employee suggestions in Dubai Municipality pointed to the need to improve the daily operations of the Contracts and Purchasing Department. There was a need to speed up and simplify the tendering and contracts process particularly, as in 2018 only 97 service contracts were approved as against the 320 contract requests due to delays and inaccuracies in the process. With service contracts issued each year in excess of more than AED 800 million, the importance of this project could not be underestimated.

Project Aim:

The aim of the project was to find and implement best practices to accelerate the service contracts process from an average of 210 days (2018) to 45 days (December 2019).

The scope of the project included all service contracts irrespective of their type and size. The timeline measured the time from when a requisition order was submitted, to the time suppliers received an assigned contract. The plan was to have a fully integrated contracts operations through adopting the best technology that reduced the timeline without compromising the quality of the process.

DM: Digital Transformation of Contracts

9.2 Review

During the Review stage the benchmarking team undertook five major activities as follows (1/2):

- Used the RACI-VS matrix (Responsible, Accountable, Consulted, Informed, Verified, and Signed-off) to assign responsibilities for team members to complement the TRADE stages.
- Carried out a stakeholder analysis to identify the stakeholders from different business units and understand their needs. The stakeholders were categorised into supportive (advocate), un-supportive (blocker) or neutral and strategies were developed to mitigate any barriers and engage each identified stakeholder (Figure 9.3). The analysis assisted in designing a communication and training plan and 95 stakeholder meetings to ensure maxi-mum participation.

	Who?		
Ref	Name of the Stakeholder	Role	Influence
1	Business units in Dubai Municipality	Beneficiary	2. Low power - high influence
2	Tender Officers	Beneficiary & Operators	2. Low power - high influence
3	Strategic & Excellence Department	Keep Informed	1. Low power - low influence
4	Top Management (Steering Committee)	Decisions Makers & Supporters	3. High power - low influence
5	Legal Affairs	Legal Service Provider	1. Low power - low influence
6	Supplier (Service Providers)	Keep Informed & Engaged	1. Low power - low influence
7	Investors	Keep Informed & Engaged	1. Low power - low influence
8	Smart Dubai Government	System Developer	2. Low power - high influence
9	E-supply (Tejari)	System Developer	2. Low power - high influence
10	HOD (Head of Department)	Keep Informed & Engaged	1. Low power - low influence
11	MOS (Managers of Sections)	Keep Informed & Engaged	1. Low power - low influence
12	Finance Dept	Keep Informed & Engaged	4. High power - high influence
13	Internal Audit	Keep Informed & Engaged	3. High power - low influence
14	Tender Committee	Decisions Makers & Supporters	4. High power - high influence
15	Team Member of Project	Owned the Project	4. High power - high influence

How?			
Advocate / Blocker / Neutral			
Current	Required	How could the stakeholder block the project?	Strategy for engaging the stakeholder
Advocate	Advocate	Against the Change & Complaints	Feedback Meetings + Surveys + Workshops
Blocker	Advocate	Against the Change & unfollow systems rules & Complaints	Regular Meetings + Surveys
Neutral	Advocate	Shortage in providing information	Update Information & Feedback
Advocate	Advocate	Against the Change	Shared Meetings
Neutral	Neutral	Against the Change	Shared Meetings
Advocate	Advocate	Against the Change & Complaints	Feedback Meetings + Surveys + Workshops
Advocate	Advocate	Against the Change & Complaints	Feedback Meetings + Surveys + Workshops
Blocker	Advocate	Against the Change	Feedback Meetings + Workshops
Advocate	Advocate	Against the Change	Feedback Meetings + Workshops
Advocate	Advocate	Against the Change	Shared Meetings
Neutral	Advocate	Against the Change & Complaints	Shared Meetings
Blocker	Advocate	Against the Change	Shared Meetings
Neutral	Advocate	Against the Change	Shared Meetings
Blocker	Advocate	Against the Change	Shared Meetings
Advocate	Advocate	Lack of Punctuality	Assigning tasks properly based on skills & competency

Figure 9.3: Stakeholder Analysis Matrix.

DM: Digital Transformation of Contracts

9.2 Review

During the Review stage the benchmarking team undertook five major activities as follows (2/2):

- An electronic survey was sent to the Municipality's suppliers to encourage them to share their ideas, comments and suggestions about improving the contracts cycle time.
- Seventeen tools and methods (Figure 9.4) were utilised to conduct a situational analysis and understand the current performance, practices, and systems; and to define focus areas for improvement. The project team decided to use so many tools to not only understand the current situation, but also to give all the team members' experience in using different tools to improve their skills in situation analysis.

Figure 9.4: Tools and methods used during the Review stage.

DM: Digital Transformation of Contracts

9.2 Review

Process mapping and value stream analysis (Figure 9.5) were found to be particularly useful tools and helped to identify the average time of each process and where waste existed. 18 different contract stages were identified that flowed through every single contract and the vast majority of these were paper based. On average there were 87 motions and 22 approval processes with contracts taking an average of 210 days (whilst the actual value-added work spent on each contract was on average 139 minutes). Figure 9.6: Summary of findings from the Review stage.

Figure 9.5: The team reviewing the process maps for the service contracts process.

Process

- Long Process Chain - 771 min/contract
- Several handoffs
- Long Cycle Time
- Long Lead time
- High number of approvals Required
- Too high non-added value in processes
- Too high non-added value in time investment
- Manual day-to-day activities (manual process)
- Operational wastes
- Inappropriate documentation processes
- Complicated approval cycle

Performance

- Partially measured processes
- Manual Calculation of KPIs using XLS
- Outdated & stated KPIS
- No benchmarked KPIs

Quality

- Lack of standards in bid extensions
- No recorded policies for currently followed processes
- Process not aligned in Law 6
- Suppliers declining contracts
- Fewer number of suppliers quoting
- Non-compliance with the current process from business units

People

- (Low productivity) number of productions per day - 3.5 contracts
- Need for qualified & certified tender officers in contracts fields
- Weak employee objectives
- Delay by organizational units in submitting of technical reports
- Fewer number of tender officers compared to number of projects and contracts
- Weak in authoritarian, participative, delegating and onboarding style, weak escalating & approving activities

Data

- No data storage
- Depending on Excel files to extract the results of section indicators

System

- Inappropriate design system
- Non-compliance with the electronic system for all contractual stages

Figure 9.6: Summary of findings from the Review stage.

The team identified the performance measures to use and categorized them based on operations, human resources, and stakeholders' satisfaction. The measures were further sub-categorised into whether they drive a change in service quality, efficiency or effectiveness. Of key importance were measures relating to the speed of the process.

DM: Digital Transformation of Contracts

9.3 Acquire

At the beginning of the Acquire stage, Dubai Municipality defined the criteria for the selection of best practices, reflecting the priorities of the project (Figure 9.7). Thereafter, the team considered the potential benchmarking partners and how the acquisition of best practices would be carried out, for example, site visits, internet research, brainstorming, email or phone call. The potential benchmarking partners were selected based on the top 20 companies in the Gartner Supply Chain List, 2018, recommendations from COER's best practice research undertaken on behalf of Dubai Municipality, as well as involving internal benchmarking partners in Dubai Muncipality's Purchasing and Engineering Sections. From a list of 39 potential benchmarking partners, ultimately, five organisations were visited for the purpose of benchmarking exchange (Figure 9.8).

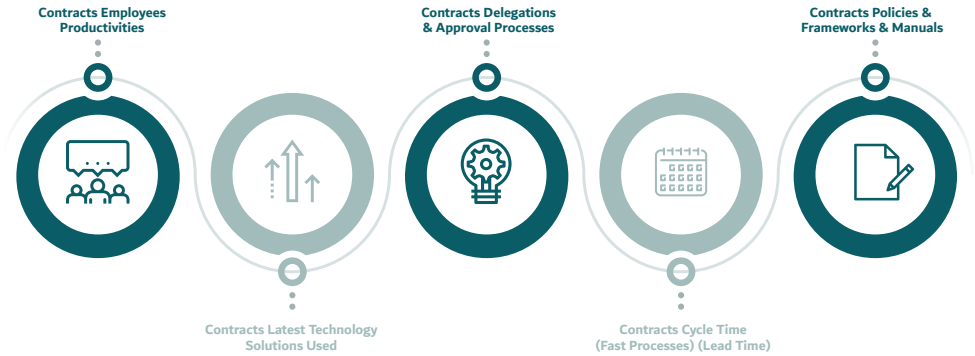


Figure 9.7: Best practice selection criteria.

Figure 9.8: Dubai Municipality's benchmarking visits.

DM: Digital Transformation of Contracts

9.3 Acquire

The five organisations were Roads and Transport Authority (Dubai), Bee'ah (Sharjah), Dubai Airports, Al Ain Safari (Al Ain) and McDonald's (Dubai Branch).

The visits gave significant insights into how to improve the tendering and contracts process. For instance, the Dubai Airports site visit gave the team one of the best inspirations for the deploy stage; to use Tableau Software to help to illustrate and analyse all of Dubai Municipality's contracts data and monitor the daily flow of contracts. This would help the benchmarking team to find delays in the contracts process and how to improve the productivity of tender officers. At McDonald's, the learning was centred on how to build strong long-term relationships with suppliers to strengthen the whole supply chain and eliminate the need for repeated tender bids from trusted suppliers. At the Roads and Transport Authority, the benchmarking team gained detailed knowledge of the designing of renewal contracts pathways, and reengineering service contract processes that were creating bottlenecks or considered to be inefficient. The team learnt about e-Evaluation from Bee-ah on how supplier proposals submitted electronically were reviewed by committees using an electronic evaluation process following specific criteria. Finally, from most benchmarking partners, including Al Ain Safari, the team learnt of the different approaches to developing Service Level Agreements between the procurement department and suppliers.

At the end of the Acquire stage, the team had collated 135 ideas and best practices from site visits, desktop research and brainstorming. These were evaluated to determine which ones would be recommended for implementation. Factors considered were ease of implementation, impact on project aim and objectives, time of deployment, availability of resources, customer confidence, high delivery speed, innovation, quality, governance, and sustainability. As a result of this analysis 41 ideas and best practices were recommended for implementation and consolidated into four main best practices.

DM: Digital Transformation of Contracts

9.4 Deploy

The four consolidated best practices recommended, approved and implemented were:

- ☑ Reengineering the Service Contracts Process. The benchmarking team reengineered the service contracts process from seven major pathways to three:
  - The first pathway is the process of requesting new services, and includes the main phases of E-Notification, E-Tendering, and E-Awarding replacing the previous system of 18 contract stages which were mainly paper based.
  - The second pathway is for renewing contracts which eliminated most of the entire previous process.
  - The third pathway is for requesting a contract change of any aspect of the contract and ensuring any changes can be traced in the system.

- ☑ Designing the Renewal Contract Pathway. The Contracts Renewal system was re-designed based on the learning from the Roads and Transport Authority; the old and the new process is shown in Figure 9.9. These changes resulted in reducing the renewal contract cycle time from 45 days to 1 day.

#	Process Description	# of Step	Operation	Transfer	Inspection / decision	Delay/ waiting	Storage	Time (minutes)	Distance (Meter)
1	Receiving the requisition& inspection (D)							2	0
2	Assigning the requisition (D)							1	0
3	Receiving and inspection							5	0
4	Publishing the requisition							7	0
5	Waiting offers submission & extending,							?	0
6	Opening the RFQ & Technical envelop							4	0
7	Waiting technical evaluation							?	0
8	Closing technical envelop							2	0
9	Opening & closing commercial envelop							2	0
10	Submitting For technical approval							1	0
11	Waiting For technical approval							?	0
12	Submitting For financial approval							1	0
13	waiting For financial approval							?	0
14	Submitting For H. committee's approval							1	0
15	Waiting For H. committee's approval							?	0
16	Awarding or Rejecting the RFQ							5	0
17	Contract preparing with legal advisory							30	0
18	Submitting contract's approval (B.U.)							2	0
19	Waiting B.U. approval (B.U.)							?	0
20	Submitting contract's approval supplier							4	0
21	Waiting supplier approval							?	0
22	Preparing contract with legal advisory							10	0
23	Submitting for BU approval							5	0
24	Waiting for BU							?	0
25	Submitting supplier singing							5	0
26	Waiting BU singing							?	0
27	Submitting for H. section signing							2	0
28	Waiting for H. section signing							?	0
29	Submitting for Director signing							1	0
30	Waiting for Director signing							?	0
31	Contract singed							1	0
32	PO preparing & submitting for approval							5	0
33	Approving the PO							1	0
	Total in number		17	0	4	11	1	33	0
	Total in minutes		83 mins	0 mins	13 mins	???	1	97	

process No.	Process Description	Operation	Transportation	Decision	Delay, Waiting	Storage	Time (minutes)	Distance (meter)
1	IPR Recived (GRP)Distributor						5	0
3	submit for approval						5	0
4	Finanical member approval						5	0
5	Head of committee						5	0
6	Award						3	0
7	Issue renewal contract						10	0
	Total 7	3	0	3	0	0	33	0

Figure 9.9: The old 33-step contract renewal process and the new 7-step contract renewal process.

DM: Digital Transformation of Contracts

9.4 Deploy

- Creating and Managing a Data Warehouse. A data warehouse was created by combining data from multiple sources (including from the Government Resource Planning system and E-Supply system). The data warehouse was built within a month and includes not only the contracts section data, but all contract department's operations (purchasing, specialized contract, and engineering contract section). Contract data has been cleaned and consolidated enabling current and historical data to be quickly found and used for decision making.

- **e-Evaluation – Automation of bid evaluation committee.**

  The evaluation of bids is one of the most important stages of the contract process. Figure 9.10 illustrates a bottleneck with the evaluation committee unable to process more than 5 contracts per week when holding only one meeting per week. Now the contract committee does not meet to evaluate the bids because the same can be done online increasing the capacity of the committee. In addition, further enhancements to the process requiring no paperwork and improved evaluation criteria speeded up the process enabling up to 7 contracts per day to be processed instead of 1.

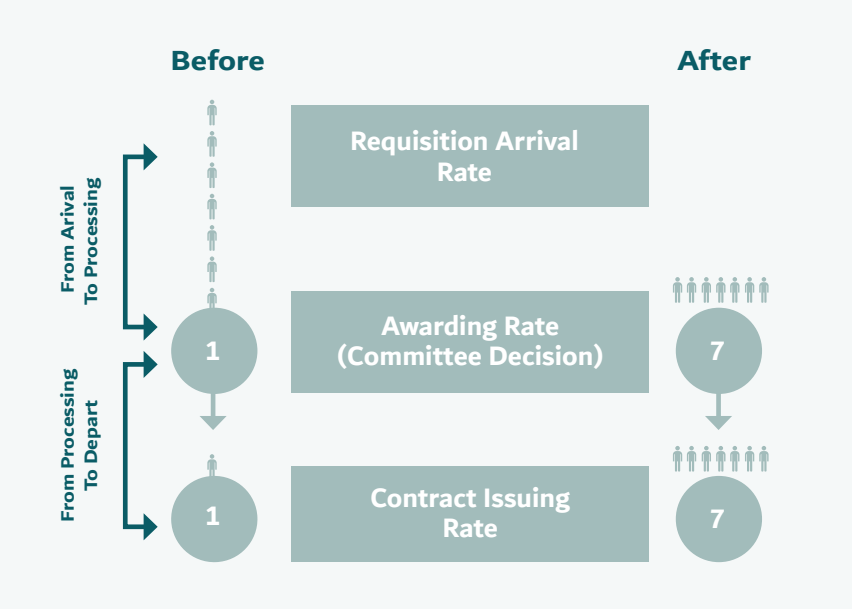


Figure 9.10: Process blockage at the evaluation committee stage.

DM: Digital Transformation of Contracts

9.4 Deploy

In addition to the four consolidated best practices, 37 quick wins were implemented over the course of the project. Therefore, as soon as the team had a good idea or identified a best practice, it was implemented if few resources were required. Examples of some of the implemented quick wins are shown in Figure 9.11. The quick wins, proved to be a game changer for the project, as they helped to gain the sponsor's and stakeholders' confidence and motivated the team throughout each stage of the TRADE Methodology.

Developed Procurement Strategic Plan and Master Plan.	Automatic publishing, communication, and invitation of tenders.
Downsizing operations - combining and redesigning contract operations from 7 scattered operations to 2 main operations for service contracts.	E-notification - Automation of publishing procedures, integrating the publishing notification with DM website, eliminate the advertising process, digital offers, automatic bid bond, and tasks assigned.
Introduced Service Level Agreements - a document between the service provider (Contracts & Purchase Department) and its internal customers (Business Units) specifying services needed and time deliverables.	
Automated the scope of work, and evaluation criteria. Eliminate the advertising process.	Digital Signing of Contracts.
Automatic financial envelop evaluation.	Automatic technical envelop evaluation, scoring, and approval.
Automatic committee discussion, requesting and approvals.	Automatic financial scoring and approval.
Tender Officers skills upgrading with all tender officers attending at least 2 training courses by the Chartered Institute of Procurement and Supply in 2019.	Automatic awarding of decision and approval. Implement Stakeholders Instance Happiness Meter.

Figure 9.11: Examples of some quick wins that were implemented.

Due to the time limitations of the project, other best practices and ideas that could not be implemented within one year have been planned for implementation up to 2022. The team added a stage to TRADE called sustain for future practices.

DM: Digital Transformation of Contracts

9.5 Evaluate

The team evaluated the success of the project through five major metrics:

Time Metrics:

- The average time for contract completion - from approved date of requisition received to the date of awarding the contract reduced from an average of 99 days (March 2019) to 24 days (December 2019). Refer to Figure 9.12.
- The average time for contract renewals reduced from 45 days (March 2019) to 1 day (December 2019) with process steps reduced from 97 minutes to 33 minutes.

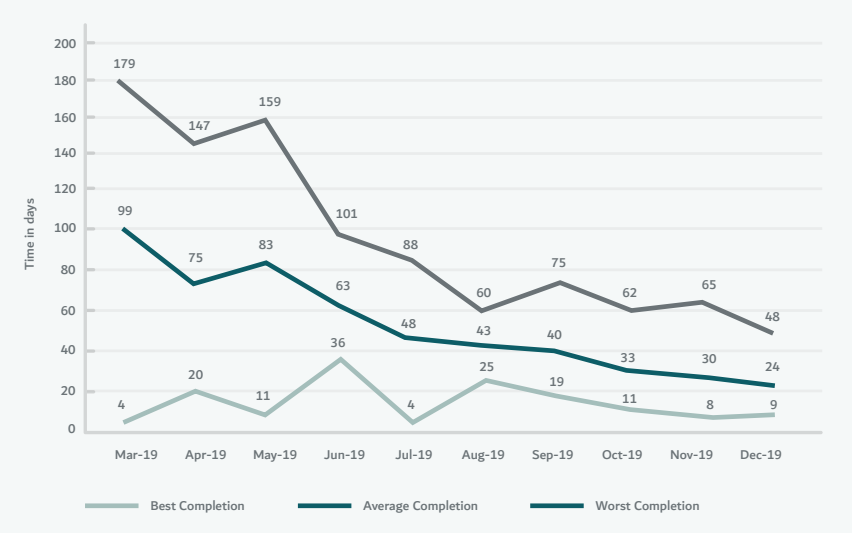


Figure 9.12: Positive downward trend in average contract lead time from March to December 2019.

Output Metrics:

- A 74.4% growth in productivity was achieved. The contract section is now able to complete more contracts with 97 completed in 2018 in comparison to 380 in 2019.

DM: Digital Transformation of Contracts

9.5 Evaluate

Cost Metrics:

- Overall, this project has saved Dubai Municipality in excess of AED 80 million in one year consisting of productivity contribution savings in excess of AED 67 million per year and budget spend savings in excess of AED 13 million per year. The productivity contribution saving was calculated by comparing the cost to scale up the old contract system (from processing 97 contracts per year) to process the same number of contracts as the new improved system (processing 380 contracts per year).

Key direct cost savings were:

- Reducing paper saved 23,000 AED.
- Advertisement savings 13,440,000 AED.

Productivity contribution savings:

- Operation savings 420,000 AED.
- Queuing Savings 687,060 AED.
- Quick wins savings 170,000 AED.
- Retender reduction savings 1,730,000 AED.
- Delay reduction savings 59,160,000 AED (based on daily delay cost of 837 AED per day).
- Advertisement savings 5,500,000 AED.
- Reducing expected costs savings 860,000 AED.

Process Complexity Metrics:

- Transformed a manual process to a 100% digital contract cycle and being the first among Dubai government to have a paperless contract process. Due to the elimination of many non-value adding processes and through process automation, the contract stages were reduced from 18 to 8 stages. The revised 8 stages are shown in Figure 9.13 and labelled stages 1 to 8 from initiating the tender requisition to awarding the tender. Stages 9 to 12 were outside the scope of the project although these stages were also enhanced.

Figure 9.13: The new service contract journey as a result of the benchmarking project from initiating the tender (Stage 1) to awarding the contract (Stage 8).

DM: Digital Transformation of Contracts

9.5 Evaluate

Quality Metrics:

- Questionnaires were undertaken with Dubai Municipality's business units and suppliers before and after implementation, and show improvements in satisfaction (Figure 9.14 – 9.15).

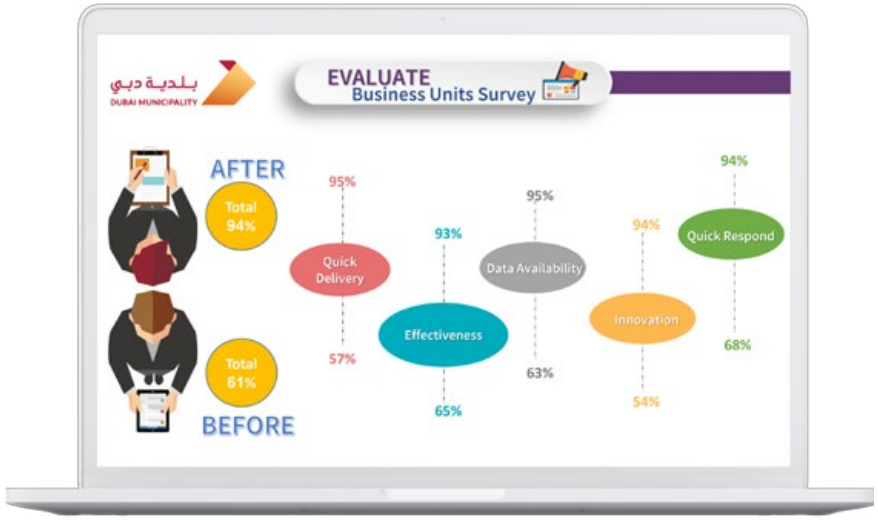


Figure 9.14: Evaluate Stage: Business units satisfaction survey.

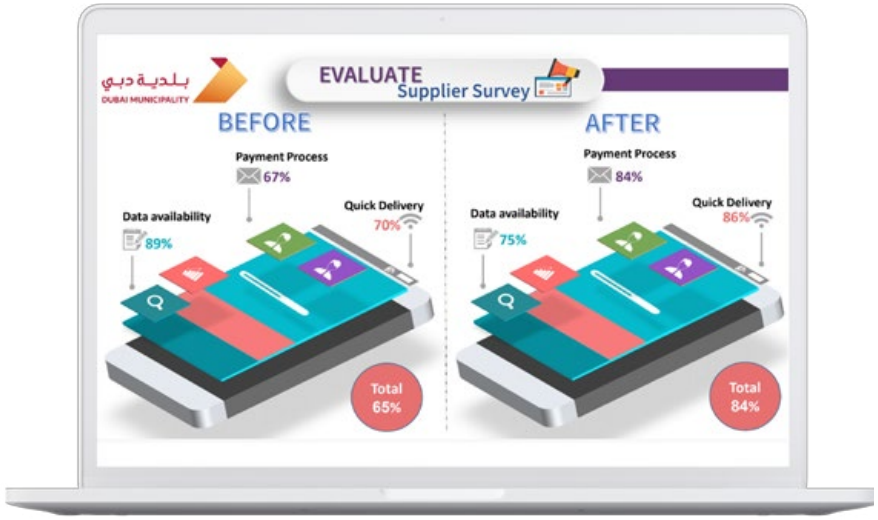


Figure 9.15: Evaluate stage: Customer satisfaction survey.

Summary of project achievements of Dubai Municipality

Terms of Reference

Aim:

The aim of the project was to find and implement best practices to accelerate the service contracts process from an average of 210 days (2018) to 45 days (December 2019).

Review

Situation analysis:

The team studied the factors that were leading to a contract cycle time of 210 days consisting of 18 different contract stages. 17 analysis tools were used for the situation analysis including SWOT and fishbone, value stream analysis, process mapping, risk management and surveying the opinions and needs of suppliers and stakeholders. Gap analysis revealed that a) Processes - were mostly manual and paper based with many non-value adding processes (including 22 time consuming approval processes) b) People - low productivity with blockages at the contract committee stage in evaluating bids and opportunity to increase the number of qualified tender officers c) Performance - partially measured processes, manual calculation of KPIs and outdated KPIs; the team decided the most important performance measures to use d) Quality and standards - data handling and system management needed enhancing to reduce errors.

Acquire

- **Methods of learning:** Desktop research, site visits, team brainstorming activities.
- **Number of best practices identified via desktop research:** 32.
- **Number of site visits:** 5.
- **Number of organisations interviewed (by site visit or phone calls):** 5.
- **Names of organisations interviewed (by site visit) and countries:** Roads and Transport Authority (UAE), Bee'ah (UAE), Dubai Airports (UAE), Al Ain Safari (UAE), Mc Donald's (UAE).
- **Number of best practices identified via site visits:** 42.
- **Number of improvement ideas by the benchmarking team**: 61.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 135.
- **Number of best practices/improvements ideas recommended for implementation:** 41.

Summary of project achievements of Dubai Municipality

Deploy

- **Number of best practices/improvements approved for implementation:** 41.
- **Description of key best practices/improvements approved for implementation:** There were four major practices implemented: 1. Re-engineering the Service Contracts Process from seven to three pathways for i) requesting new services (including digitizing processes of E-Notification, E-Tendering, and E-Awarding) ii) renewing contracts iii) requesting a contract change. 2. Designing the Renewal Contracts Pathway to reduce the renewal contract cycle time from 45 days to 1 day 3. Creating a data warehouse to include all contract related data for improved decision making 4. e-Evaluation with all contracts evaluated online, instead of through a weekly committee meeting. 37 quick wins were implemented including digital signing of contracts, downsizing operations from 7 scattered operations to 2 main operations, introduced Service Level Agreements between Contracts and Purchasing Department with internal business units, eliminated the advertising process, Tender Officers skills upgraded, automatic publishing, communication, and invitation of tenders replaced the advertising process, and automatic awarding of decisions and approvals to suppliers.

Evaluate

- **Key achievement:**
  A complete reengineering and 100% digitization of the service contract cycle, resulting in a reduced contract completion time from an average of 210 days (2018) to 24 days (December 2019), enabling 380 contracts to be completed in 2019 from 97 in 2018. To achieve this, four major practices and 37 quick wins were implemented leading to financial savings in excess of AED 80 million in one year and increased satisfaction of suppliers (65% to 84%) and Dubai Municipality's business units (61% to 94%).

Non-financial benefits achieved within one year and expected future benefits:
Transformed a manual process to a 100% digital contract process and being the first in Dubai's government to have a paperless contract process.
The cycle time for contract completion reduced from an average of 210 days (2018) to 24 days (December 2019).
Service delivery of the contract reduced from 45 days (March 2019) to 1 day (December 2019); process steps reduced from 97 mins to 33 mins.
74.4% increase in productivity with 380 contracts completed in 2019 from 97 in 2018.
Reduction in contract stages from 18 to 8.
Overall business units' satisfaction increased from 61% to 94%.
Overall supplier (customer) satisfaction increased from 65% to 84%.
An ambitious 2022 plan for practices that could not be implemented within one year was agreed to.

Financial benefits achieved within one year and expected future benefits:
Saved in excess of AED 80 million in a year (consisting of productivity contribution savings in excess of AED 67 million per year and budget spend savings in excess of AED 13 million per year).

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	18 Feb 2019	10 March 2019	27 May 2019	29 September 2019	20 October 2019
Finish	07 March 2019	26 May 2019	10 July 2019	28 November 2019	12 December 2019

Chapter

10

Dubai Police HQ

Safe Bags
(Airport Secure Luggage)

Dubai Police: Safe Bags (Airport Secure Luggage)

Dubai Police HQ's benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (7 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER).

This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 10.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awards Dubai Police's team 7 Stars TRADE Certification.

10.1 Terms of Reference

Note the Terms of Reference was developed pre-COVID and therefore some of the predictions in terms of passenger numbers and visitors to the UAE that were originally provided for 2020 are no longer valid. Also, EXPO 2020 Dubai has moved back a year to become EXPO 2021.

Background:

Dubai Airports, the world's busiest international passenger airport, handled and secured 31,093,870 bags in 2018. By EXPO 202O these numbers were expected to rise by more than 40%. Terminal 3 of Dubai International Airport is expected to host most EXPO visitors as Emirates Airlines operates most international flights and is the Premier Partner and Official Airline of the EXPO. Furthermore, Terminal 2 of Dubai International Airport which operates Emirates Airline's code-share partner FlyDubai is expecting a passenger increase of 25% by 2021.

Dubai Police, and its stakeholders are tasked to assist Dubai International Airport to handle these growing passenger numbers while maintaining the provision of World-Class services. The General Department of Airports Security, Dubai Police, provides and maintains the safety and security of civil aviation by carrying out security procedures.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.1 Terms of Reference

Background:

The project “Safe Bags” aims to increase the percentage of bags that are passed as safe by the Hold Baggage Screening (HBS) system without compromising security. The HBS system uses specialized equipment and processes to screen passenger checked-in baggage (or hold baggage) to prevent the boarding of prohibited items which are classified as either:

- Illegal items: Ivory, inflammatory items, chemical, and poisonous materials.
- Dangerous/Prohibited items: Lithium batteries, liquid items exceeding the capacity of 5 litres, pressurized containers, electronic equipment prohibited by airline companies.

The HBS system consists of multiple levels of security from Level 1 to 5 and at each level bags can be passed as safe and then begin their journey to the airplane. If a bag cannot be confirmed as safe it proceeds to the next security check with the final check being at Level 5 where a police inspector is required to summon the passenger and physically search the bag.

The procedure for Level 5 has many drawbacks such as:

- Difficulty in contacting the passenger as he/she might be anywhere in the terminal and the majority are transit passengers.
- Due to the long waiting time for inspection, bags get stacked in search rooms and are exposed to loss and damage.
- Late arriving passengers that are summoned may miss their flights.
- Some bags do not reach the aircraft on time causing flight delays.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.1 Terms of Reference

Background:

To improve the clearance rate of safe bags the project scope included investigating:

- Capabilities and productivity of the employees responsible for screening.
- Efficiency of the hold baggage screening process.
- Role and responsibilities of the multiple stakeholders involved in baggage handling and securing.
- Operational capacity of existing resources.
- Management team and supervisory performance.
- Methods of operations.
- Innovative ideas in securing public facilities.

To reduce the number of safe bags arriving at Level 5, the team decided to focus on increasing the clearance rates of safe bags at Level 2 and Level 4 as this is where there was human intervention with a screener's decision affecting clearance rates whilst Level 1 and Level 3 were fully automated with artificially intelligent machines with a set standard of sensitivity

The project encompassed Dubai International (DXB) Airport Terminals 1, 2, and 3.

The project scope excluded:

- Outsourcing HBS operations and processes.
- Increasing number of staff or technicians (by hiring).
- Increasing budget of the department.
- Other solutions that deal with utilizing a third party in the HBS processes.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.1 Terms of Reference

Project Aim:

To find and implement best practices to enhance the efficiency and operational capacity of the Hold Baggage Screening System (HBS) as well as the productivity of employees engaged within the different processes and levels of the HBS in Dubai Airports by EXPO 2020 (during which the baggage handling is expected to rise by more than 40%). To achieve these objectives, thereby reducing the number of passengers summoned to search rooms to inspect suspected checked-in baggage at Level 5, the project aimed to:

- Increase the monthly clearance rate of checked-in bags at Level 2 of HBS by 3% between April to December 2019.
- Increase the monthly clearance rate of checked-in bags at Level 4 of HBS by 7.5% between April to December 2019.

The benchmarking team set the target clearance rate as a combined average across all Dubai Airport Terminals; however, each terminal was set a control threshold to stay within.

The benchmarking team undertook an extensive situational analysis that included the following:

- SWOT for the microenvironment (Figure 10.2), and PESTLE on the aviation industry for the macro-environment and challenges.
- A 45-question online survey completed by all employees (screening analysts and supervisors), some passengers passing through the airport, and multiple stakeholders of the airport.
- Based on the results of the survey, a revised fishbone diagram was created highlighting four areas of focus; 1. Employees 2. Baggage 3. Passengers 4. Stakeholders.
- Foresight research was undertaken on the future trends affecting aviation security such as enhanced detection technology, data and artificial intelligence, risk-based screening, more self-service and automation, improved cybersecurity, and robotic assistants.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.2 Review

Figure 10.2: Dubai Police 'Safe Bags' - SWOT analysis.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.2 Review

Key findings from the situational analysis are listed below:

- Employees had difficulties in communicating with airline companies in a quick manner.
- Lack of regular training sessions or workshops.
- Baggage storage at the final level of inspection was problematic; bags piled up and stacked for long durations at the final level of inspection.
- Huge increase in baggage traffic in recent times.
- Baggage prone to damage.
- Pressure on airline companies to ensure passenger satisfaction at Dubai Airports.
- Financial losses incurred on airline companies due to any delay caused to a passenger by security measures.
- Uneven distribution of bags from the baggage handling system to the final level of inspection of the HBS process.
- Search rooms are not properly prepared for future improvements that aim to decrease cases of passenger summoning.
- Equipment and machinery cannot be updated or replaced easily.
- Difficulty in communicating or finding passengers at the airport's terminal for summoning.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.2 Review

Key findings from the situational analysis are listed below:

- Passengers miss their flight due to complex, time consuming security procedures at the final level of inspection of the HBS process.
- Passenger's level of ease, satisfaction, and comfort at Dubai Airports are affected due to the escorts to the search room or when prohibited belongings are confiscated.
- Passenger dissatisfaction affects the reputation of the airport and its standing amongst other internationally leading airports of the world.
- Flight delays disrupt the entire operations of the airport.
- The hold baggage screening and baggage handling system are intricate systems, consisting of several hundred kilometers of combined length of bag conveying lanes. Thus, issues are hard to pinpoint and identify due to its length.

Performance data was collected for all terminals to understand variations in performance. This was a challenging exercise that required the creation of a statistical dashboard to monitor performance of the HBS as the systems and servers were not programmed for this purpose. Data had to be manually extracted and inserted into the performance measurement dashboards and charts.

A detailed analysis deduced that the bottleneck and challenges in the HBS system were primarily in security screening Levels 2 and 4 which required human operator assistance (Levels 1 and 3 were fully automated).

The team found that at Level 5 not all bags were coming from the previous level of inspection, some were being received that had issues due to their shapes, sizes, tags, or baggage handling system errors. For these bags, the handling agent would rescan the tags, reorient the bag, and send them back into the HBS system again. Therefore, the team concluded after the Review stage and through discussions with a benchmarking partner, Al Habtoor, that Level 5 had to be divided into another level, specifically dealing with cases where passengers were summoned into the search room. This new level was named Level 6.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.3 Acquire

The information derived from the Review stage was used as a baseline for devising the criteria to identify the benchmarking partners for the Acquire stage. The rationale was based on the potential partners' expertise in human resource management, product chain operations, organizational culture, technology advancement, public awareness, safety and security of airports, employee productivity, the efficiency of equipment, automation of operations, security sector, and factors like organizational size, and leading worldwide organizations.

A total of 44 potential benchmarking partners were identified through intensive research, from which benchmarking partners were selected for site visits, internet research, email or phone interviews, and questionnaires/surveys. The organizations or businesses were categorized into 1) Core benchmarking partners: with similar processes and the same core functions and activities 2) Creative benchmarking partners: with similar processes but different core functions and activities.

A survey was conducted with the core benchmarking partners (Figure 10.3) and followed up by telephone and email communication; they were Changi International Airport, Singapore; Hong Kong International Airport; Narita International Airport, Japan; Transport Security Administration, United States of America; and Department for Transport, United Kingdom.

The team undertook 9 benchmarking visits. Some of the best practices acquired were: Transport Security Administration's (United States) confiscation procedures of prohibited items from bags without the summoning of passengers; FedEx's (Dubai) human resource management and annual financial incentives system for employees (Figure 10.4); Al Habtoor's (Mitsubishi Motors) (Dubai) specialized training courses and troubleshooting by specialists; City Makers' (Dubai) project management ideology and systematic processes (Figure 10.5); Dubai Police's General Department of Transport and Rescue's best practices in using the TRADE Methodology. Other local benchmarking partners were Dubai Customs, Dubai Air Navigation Services, and Smiths Detection (Technical Team) (Dubai). BPIR and COER (New Zealand) provided critical inputs for public awareness programs, and control charts to monitor performance of the HBS analysts.

At the end of the 'Acquire' stage, the Dubai Police team identified a total of 41 best practices and improvement ideas, of which 17 initiatives were reviewed for implementation.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.3 Acquire

Key Questions	Sub Questions
Equipment	
How do you handle baggage screening at your airport?	In this question, we would like from you to clarify to us the method / system that you have in place in order for us to know which best practise is being done at your airport to secure all the checked-in baggage that goes to the airplanes.
What is the system or process that you have established for your baggage screening (checked-in baggage)?	This question is similar to the question above, where more detail is to be given.

Key Questions	Sub Questions
Employees	
What are the advanced training programs given to your employees?	If your employees have already gone through basic checked-in baggage screening training programs, what are the advanced training programs that are given to them that are related to checked-in baggage screening?
How do you track employee performance in checked-in baggage screening process?	Is there a certain way that you track the performance of the employees that are employed at the checked-in baggage screening process? If so, how do you define their "performance"?

Key Questions	Sub Questions
Baggage	
Is your baggage handling process completely efficient and without any errors? if so, how did you achieve that?	Does your airport have a error free way of handling checked-in baggage and how did you achieve that?
What is your checked-in baggage storage system, for piled up bags? How do you clear them?	If there are many bags that require manual inspection and clearance and have reached the final level of inspection, how are they stored and then cleared?

Key Questions	Sub Questions
Stakeholder & Airline Companies	
In the security perspective, how do you handle risks related to the reputation of the airport?	For example, dissatisfied passengers that complain due to their bags being inspected or their prohibited item being confiscated from their checked-in bags.
How do you handle disputes due to delayed flights?	Passengers that get offloaded from the airplane and need to be summoned to remove the prohibited item from their bag and miss their flight, then ask for compensation and so on.

Figure 10.3: "Safe Bags" survey questionnaire for core benchmarking partners.

Figure 10.4: Dubai Police Team during the benchmarking visit to FedEx (UAE).

Figure 10.5: Dubai Police team visiting City Makers (UAE).

Dubai Police: Safe Bags (Airport Secure Luggage)

10.4 Deploy

Once the improvement ideas were assessed based on the established criteria for selection (expected benefits, ease/impact score), the benchmarking team ensured that the main stakeholders were integral to every aspect of the execution stage. A Master Action Plan for 13 best practices was developed for implementation, categorized into six areas as described in Figure 10.6.

Area for improvement	Description of initiative, project or action to implement	Expected benefits? (Financial and non-financial)	Expected benefits? (Financial and non-financial)	Status of the Initiative	Benchmarking Partners
Security Process	Alteration of Baggage Screening Process at level 5 of security and introducing of new level of inspection (Level 6) (Specialist). Level 6 of inspection compromises of 2 sub-sections: • Opening bags to confiscate prohibited items (unsafe to board aircraft) from check in bags without the presence of passenger. • Summoning passenger to confiscate illegal items. The previous procedure at the final level of inspection was to summon the passeger, open the bag, and confiscate the prohibited or illegal items with his presence in the search room.	• Reduce the number of passengers summoned to search room. • Reduce number of flight delays due to security issue. • Reduce losses on airlines company. • Saving time and effort on the police and improve performance and increase baggagge clearance rate.	Risks: • Passengers reject the idea of physical inspection of their bags in their absence. Solution: • Attain legal authorization to physically inspect bags without presence of passenger, provide notification letter to passenger regarding confiscation.	Implemented.	ALHABTOOR
	Implementing a process to ensure the safety of the contents of bags during the inspection process, through video recording and supplying the evidence (Video clip of the opening bag in the absence of its owner) in case of missing report by the owner of the bag to the concerned entities.	• Follow up and process logging.	Risks: • Irresponsibility of employees in following guidelines provided to them during inspection of suspicious bags. Solution: • Supervision of Hold Baggage Screening supervisor during inspection process to ensure proper rules and regulations are followed.		Transportation Security Administration

Dubai Police: Safe Bags (Airport Secure Luggage)

10.4 Deploy

Area for improvement	Description of initiative, project or action to implement	Expected benefits? (Financial and non-financial)	Expected benefits? (Financial and non-financial)	Status of the Initiative	Benchmarking Partners
Employee Productivity	Incentive system for highly productive and efficient inspectors will promote employee happiness and higher productivity. Incentive system consisted of appreciation letter, administrative leave, and happiness hours leave.	• Increase Employee happiness by rewarding their best performance. • Eliminate unproductive activities.	Risks: • Misuse of incentive system to appreciate favourable employees rather than deserving candidates. Solution: • Implement methodology to ensure their fair assessment and appreciation of employees.	Implemented.	ALHABTOOR, FedEx, Transportation Security Administration, DUBAI CUSTOMS, BPIR.com, CENTRE FOR ORGANISATIONAL EXCELLENCE RESEARCH, DUBAI POLICE, General Department of Transport and Rescue
	Increase efficiency of inspection through training programs will increase efficiency and employees gain more experience.	• Highly trained personnel. • Increase feeling of safety and security. • Increase productivity of Hold Baggage Screening Dept and faster screening processes.	Risks: • Unavailability of sufficient number of employees in Hold Baggage Screening control room due to training. Solution: • Provide on-duty training to employees in line with task a hand.		
	Reviewing screener's performance through live monitoring of Level 2, Level 4, Level 5 and Level 6 of the HBS through control charts, system logs and report outputs daily will help in studying performance trend and rectifying mistakes in real time therefore improving output.		Risks: • Unfiltered data provided by stakeholders could show unrealistic performance.		
Terminal Performance	Assign minimum number of employees available in baggage control room to ensure periodic rotation of inspectors during the screening process.	• Stakeholders satisfaction. • Increase productivity of Hold Baggage Screen Department. • Improve airport operations.	Risks: • Insufficient number of employees in Baggage Handling department. Solution: • Study current workload in the terminal and relocate screeners.	Implemented.	dans, smiths detection

Dubai Police: Safe Bags (Airport Secure Luggage)

10.4 Deploy

Area for improvement	Description of initiative, project or action to implement	Expected benefits? (Financial and non-financial)	Expected benefits? (Financial and non-financial)	Status of the Initiative	Benchmarking Partners
Public Awareness	Use Dubai Police media platform to broadcast Safe Bags initiative. Soft Brochure regarding prohibited items while booking flight tickets. Spread awareness through Press Conference. Social media coverage in spreading awareness while departing from U.A.E.	• Raising largest public awareness campaign on legal procedures. • Raising public awareness of the materials that are forbidden to carry in bags while traveling. • Raising awareness of travel procedures (See figure 10.8).	Risks: • Inability to target specific audience. • Inability to find suitable partners to publish and spread awareness. Solution: • This can be solved by using local means of communication within organisation like social media apps, smart app, etc.	Implemented.	BPIR.com
Work Environment	Improve working environments in security screening rooms. Standardised workstation for employees in Baggage Control Room.	• Increase employee satisfaction provide the best working environment. • Increase productivity and efficiency.	Risks: • Drop in average productivity of Hold Baggage Screening. Solution: • Temporary transfer of control room to a substitute location will prevent drop in productivity.	Start date: 30 Sep, 2019 - Ongoing.	Transportation Security Administration dans
Organisational Restructure	Restructure and innovate a centralised center for Hold Baggage Screening of all terminals.	• Easier management of process and man-power. • Reduce employees fatigue. • Immediate availability of data and information.	Risks: • Resistance to change. Solution: • Restructure of organisational flow and centralisation of Hold Baggage Screening under one management.	Future Plan 2020.	BPIR.com FedEx

Figure 10.6: Dubai Police "Safe Bags" action plan showing the implemented best practices during the 'Deploy' stage.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.4 Deploy

11 practices were implemented within one year. Another two are in the process of being implemented concerning the work environment and organisational restructure to a centralised centre for screeners to monitor checked-in luggage across all three terminals. The impact of the practices was closely monitored through a weekly control chart displaying the project's key performance indicators. Figure 10.7 shows one of the screeners receiving recognition through the new incentive scheme, and Figure 10.8 shows the numbers of screeners recognised. The incentive scheme consisted of:

Figure 10.7: Recognition for one of the screeners.

- An appreciation letter to the top HBS screener for each shift of each terminal in Dubai Airports.
- Administrative leave, one working day added to the top HBS screener over one month for each shift of each terminal in Dubai Airports.
- Happiness hour leave (an early 3 hour leave or late arrival based on the screening analyst's request) to the top HBS screener over one month for each shift of each terminal in Dubai Airports.

	Terminal 1	Terminal 2	Terminal 3
October	5 Highly Perfoming Screening Analysts Awarded.	5 Highly Perfoming Screening Analysts Awarded.	9 Highly Perfoming Screening Analysts Awarded.
November	5 Highly Performing Screening Analysts Awarded.	5 Highly Performing Screening Analysts Awarded.	9 Highly Performing Screening Analysts Awarded.

Figure 10.8: Number of screeners recognised.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.4 Deploy

Figure 10.9 shows the current working environment for screeners in Terminal 2 (left photo) and how it is being updated to the same level as Terminal 1 (right photo). At the same time planning has begun to have one centralised control centre for screeners covering all the terminals to ensure consistency and higher levels of productivity.

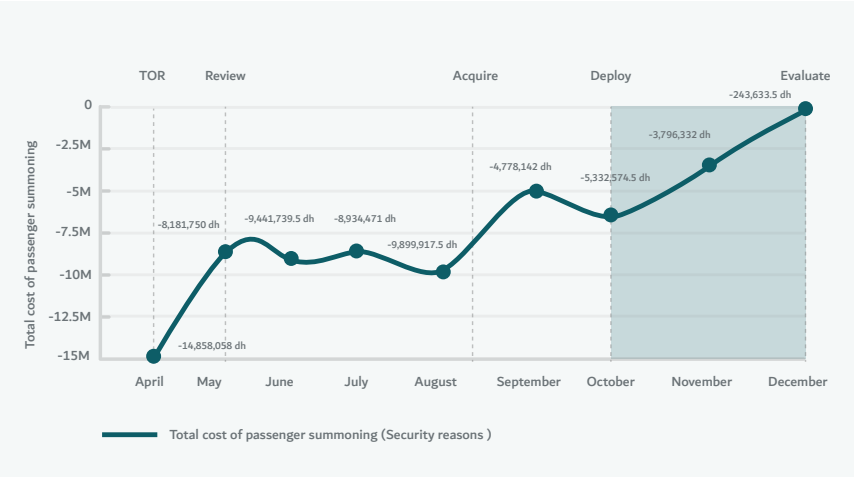
Figure 10.9: The current working environment for screeners in Terminal 2 (top photo) is being updated to the same level as Terminal 1 (bottom photo).

Figure 10.10: Public awareness measures – A robot deployed within Terminal 2 of Dubai Airport (departures area) displaying instructions to passengers about prohibited lithium batteries not to be carried in checked-in bags.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.5 Evaluate

The impact of the project has been significant for Dubai Police's stakeholders – the airlines and airline passengers. The project has saved the airline companies approximately AED 67 million (and projected to be in excess of AED 100 million per year in future) based on the reduction in the number of passengers being summoned which has resulted in less delayed flights (delayed flights costs an airline approximately AED 330 per minute plus compensation costs for summoned passengers who miss their flights). Normally, there is a flight delay cost of approximately AED 15 million per month (calculated from April 2019's data prior to any improvements being made). Figure 10.11 shows how the monthly flight delay cost began to reduce from April 2019 as the benchmarking team's practices started to be implemented.



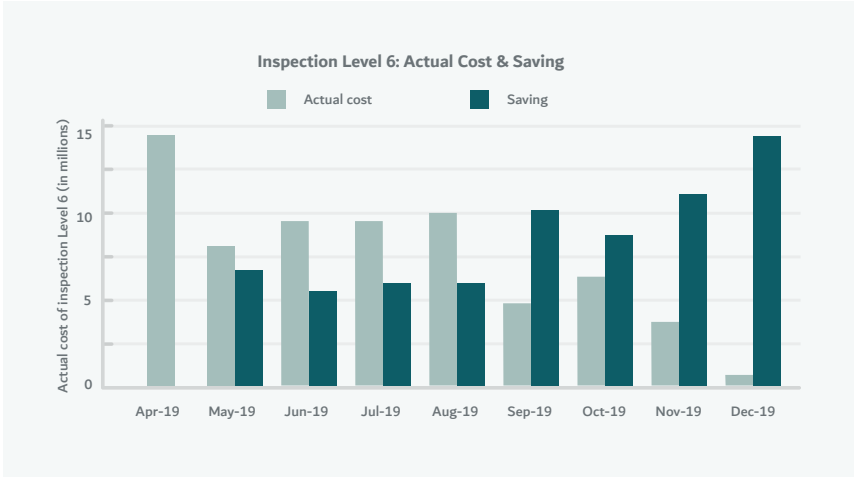


Figure 10.11: Actual cost and saving: total saved cost of passenger summoning = AED 66 million.

Dubai Police: Safe Bags (Airport Secure Luggage)

10.5 Evaluate

In addition to these savings, Dubai Police saved approximately AED 2.8 million due to productivity improvements from 94.8% (Apr 2019) to 99.3% (Dec 2019) which meant the need to employ less screeners to do the same amount of work (saving on salaries, recruitment and training costs). Productivity improvements were achieved through: incentives, whereby the most efficient screening analysts were recognised; specialised training for screening analysts for inspectors at level 2, level 4, and level 6 of the HBS process; and assigning of a standard minimum number of screening analysts per shift resulting in a reduction in timeout (failing to take a decision to clear or reject a bag within the given timeframe), increased overall accuracy in screening decision making, and resilience to peak hours and baggage loads.

Other achievements included:

- **Level 2:**

  Monthly clearance rate of safe bags checked-in at Level 2 increased by 4.5% between April to December 2019.

- **Level 4:**

  Monthly clearance rate of safe bags checked-in at Level 4 increased by 13.9% between April to December 2019.

- **Level 5 and Level 6:**

  Level 5 now enables the specialist screeners to address baggage issues due to their shapes, sizes, tags, or baggage handling system errors and clear it; they also segregate the contraband item bags and pass them on. For more accuracy and focus, Level 6 is only for bags containing prohibited items (open and confiscate without summoning the passenger) and illegal items (requires summoning). Key milestones were a major decrease in the number of passengers summoned for inspection at Level 6 (number not shown for confidentiality purposes) and a significant increase of bags opened without summoning (the process of opening bags without summoning is videoed).

- **Enhanced Public Awareness:**

  Social media platforms garnered attention with a total of 266,595 views of the image and video content created for airport security 'Safe Bags' project. The effect is expected to show as time goes on with a higher percentage of safe bags passing Level 1 of inspection.

- **Other Indicators:**

  The team improved the work environment in security screening rooms and submitted a future proposal for restructuring and innovation of a centralized center for HBS of all terminals that will improve performance even more. The Airport Service Quality (ASQ) Scoring in security showed an overall increase compared to 2018.

Summary of project achievements of Dubai Police

Terms of Reference

Aim:

To find and implement best practices to enhance the efficiency and operational capacity of the Hold Baggage Screening System (HBS) as well as the productivity of employees engaged within the different processes and levels of the HBS in Dubai Airports by EXPO 2020.

Review

Situation analysis:

Analysis undertaken using SWOT, PESTLE, Fishbone Analysis, 45-question survey involving employees (HBS screening analysts, supervisors), passengers and other stakeholders, foresight research and extensive data collection to measure the performance of the 5 Levels of security screening for checked-in luggage at Terminals 1, 2 and 3. This revealed that the number of passengers being summoned for Level 5 inspections, where the checked-in bag was opened and inspected due to concerns of illegal and/or dangerous-prohibited items, was causing flight delays, affecting passenger satisfaction and contributing to airline costs of approximately AED 14 million per month (due to flight delay penalties and passenger compensation). The main challenges were at security screening Levels 2 and 4 which required human operator assistance (Levels 1 and 3 were automated) as some safe bags were not being detected and being passed to Level 5.

Acquire

- **Methods of learning:** Desktop research, site visits, surveys, email, phone calls, and team brainstorming sessions.
- **Number of best practices identified via desktop research:** 78.
- **Number of site visits:** 9.
- **Number of organisations interviewed (by site visit or phone calls):** 14.
- **Names of organisations interviewed (by site visit) and countries:** Site Visits: Transportation Security Department (USA), FedEx (UAE), City Makers (UAE), Dubai Police - General Department of Transport and Rescue (UAE), Al Habtoor Group (Mitsubishi Motors) (UAE), Dubai Air Navigation Services (DANS) (UAE), Dubai Customs (UAE), Smiths Detection (Technical Team) (UAE), BPIR & COER (New Zealand). Phone calls and email: Changi International Airport (Singapore), Hong Kong International Airport (Hong Kong), Narita International Airport (Japan), Transport Security Administration (United States of America), Department for Transport (United Kingdom).
- **Number of best practices identified via site visits:** 41.
- **Number of improvement ideas by the benchmarking team**: 45.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 164.
- **Number of best practices/improvements ideas recommended for implementation:** 17.

Summary of project achievements of Dubai Police

Deploy

- **Number of best practices/improvements approved for implementation:** 13.
- **Description of key best practices/improvements approved for implementation:** 1. Introduction of an additional level of baggage screening, Level 6, for suspected prohibited items. 2. Video recording evidence of the opening of the bags to replace summoning in most cases 3. Incentive system for highly productive/ efficient inspectors 4. New training programs for efficient inspection 5. Control charts, system logs, and report outputs daily to study screener's performance 6. Assigned minimum number of employees in baggage control room to ensure periodic rotation of inspectors 7. Use of Dubai Police media platform to broadcast Safe Bags initiative 8. Soft awareness brochure for prohibited items while booking flight tickets 9. Awareness through press conferences 10. Social media coverage for awareness while departing from UAE 11. Improved working environment in security screening rooms 12. Standardised workstation for employees in baggage control room 13. Creation of a centralised center to be responsible for baggage security of all terminals.

Evaluate

- **Key achievement:** The project saved the airline companies approximately AED 67 million (and projected to be in excess of AED 100 million per year) based on the reduction in the number of passengers being summoned for security inspections due to improvements in identifying safe checked-in bags and improved procedures enabling some bags to be opened if videoed. The project resulted in less delayed flights (saving on airline penalty fees and compensation costs for summoned passengers who miss their flights). Additional savings of approximately AED 2.8 million due to a 4.5% productivity improvement which meant the need to employ less screeners to do the same amount of work (saving on salaries, recruitment and training costs).

Non-financial benefits achieved within one year and expected future benefits:
Increase in the Airports Council International (ACI) scoring in security since the beginning of the "Safe Bags" project.
Clearance rate of safe bags checked-in at Level 2 increased by 4.5% between April to December 2019.
Clearance rate of safe bags checked-in at Level 4 increased by 13.9% between April to December 2019.
A decrease in the number of bags at Level 5 of inspection by 74%.
A decrease in the number of passengers summoned at Level 6 of inspection by 98%.
A 182% increase in the number of bags opened without summoning at Level 6 of inspection.
Terminal performance improved due to the assigning of a standard minimum number of HBS screening analysts per shift in baggage control rooms, resulting in a reduction in timeout and improved screener decision making.
With the new incentive system, the most efficient screening analysts were recognised.
Increase in screener analyst's productivity from 94.8% (Apr 2019) to 99.3% (Dec 2019).
Specialised training in inspection for screening analysts further increased their efficiency.
Enhanced public awareness on social media platforms garnered 266,595 views of the "Safe Bags" creative content.
Reconstructing and enhancing Dubai Airport Terminal 2 screening hall improved the work environment.

Financial benefits achieved within one year and expected future benefits:
Saved the airlines companies approximately AED 67 million (and projected to be in excess of AED 100 million per year) due to reduced passenger summoning.
Employee productivity savings: eliminated cost of hiring additional screener analysts = AED 2.8 million.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	25 February 2019	01 May 2019	15 September 2019	01 October 2019	01 December 2019
Finish	30 April 2019	15 September 2019	01 October 2019	05 December 2019	14 December 2019

Chapter

11

Mohammed Bin Rashid Establishment for SME Development (Dubai SME)

Improving Entrepreneurs' Start-Up Guidance and Support Services

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

Dubai SME's benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (7 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER).

This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 11.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awards Dubai SME's team 7 Stars TRADE Certification.

11.1 Terms of Reference

Background:

Established in 2002, Mohammed Bin Rashid Establishment for SME Development (Dubai SME) is an agency of the Department of Economic Development (DED), Government of Dubai, that aims to foster an entrepreneurial culture and develop a competitive SME sector for the Emirate of Dubai. The key strategies adopted by Dubai SME are to advocate a pro-business environment for developing entrepreneurship and SMEs, seed innovative start-ups, and groom promising SMEs. Dubai SMEs vision is to make Dubai the center for innovative SMEs to start, grow and expand their businesses, thus adding greater value to the economy of Dubai.

According to the Dubai Statistics Center database, SMEs represent 99% of the total number of companies operating in the Emirate, employing 51% of the workforce, and contributing around 47% of the GDP. Dubai SME supports entrepreneurs in all phases of development, right from their foundation upwards. The main services of Dubai SME include business guidance, business start-up (exemptions on trade licenses fees), business incubation services, training (through the Dubai Entrepreneurship Academy), funding, and market access (through the government procurement program).

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.1 Terms of Reference

Background:

For the benchmarking project, Dubai SME selected one of its main services to improve - the Entrepreneur's Start-up Guidance and Support Service. In particular, areas for improvement were:

- Enhancing quality of service information
- Enhancing speed of service delivery
- Develop a pre-assessment process to guide and qualify entrepreneurs (identifying which entrepreneurs were ready for start-up assistance).
- Identifying appropriate performance measures to assess the quality of start-up services.

Project Aim:

The aim of the project was to improve the process of qualifying and supporting Emirati entrepreneurs to start viable businesses.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.2 Review

To ensure that customer needs were captured, the benchmarking team commenced the Review stage by systematically gathering and analysing entrepreneurs' feedback, insights, complaints and suggestions through surveys, phone calls, dedicated open days and focus groups. The customer satisfaction survey revealed the entrepreneurs' happiness was 82.3% with service information and 83.6% for service delivery time. More revealing was the employee satisfaction rate of only 30% with the current process. To understand the reasons behind these levels of performance the team conducted focus groups with Dubai SME employees, and partners (e-Supply 'Tejari', Dubai Entrepreneurship Academy).

A SWOT analysis was undertaken, which revealed:

- Issues with the guidance services.
- Service information not up to date in the communication channels.
- Service information should be available from the first attempt for all channels.
- Not providing services as per the agreed service level agreement to clients.
- Mismatched information provided to customers at the available channels (website, call centre, reception and social media sites).
- Limited knowledge of some service providers (business advisors) in the area of entrepreneurship.
- Non-availability of a system to manage the relationship between entrepreneurs and partners.
- Weak entrepreneurship culture.
- The fear among the youth to start their businesses.
- Customer expectations to receive services via smart applications instead of physical visits.

The team considered the clients' contribution in the project as extremely critical. From client feedback the team identified and prioritized the top 3 areas for improvement as service quality, speed of service delivery, and quality of information. To investigate these further, three separate fishbone analyses were conducted and the weaknesses identified in the fishbone analysis were prioritised through a root cause priority matrix.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.2 Review

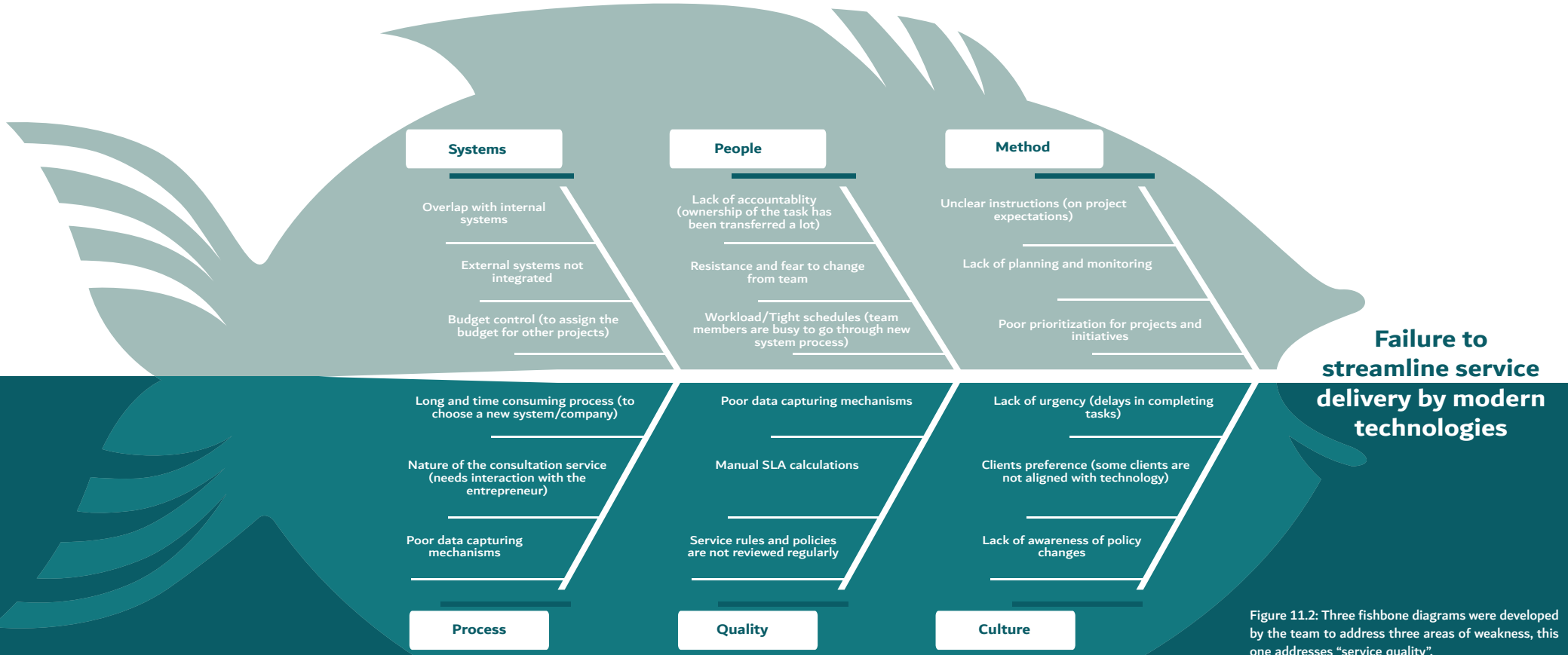


Figure 11.2: Three fishbone diagrams were developed by the team to address three areas of weakness, this one addresses "service quality".

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.2 Review

Apart from conventional tools, more complex process analysis was through the Kaizen approach. Kaizen was useful as it showed non-value adding activities and potential reasons for reductions in the number of applications (Figure 11.3). For example, of the 977 entrepreneurs that visited Dubai SME in quarter 1 2019, 281 of these were unnecessary visits. Many of these unnecessary visits were by expats and entrepreneurs who did not meet the eligibility criteria and could be addressed without the entrepreneur's physical visit to the Dubai SME Service Centre. Other specific reasons (collected by phone calls to the clients) are listed in Figure 11.4.

Startup Guidance - Process flow

Process analysis (following kaizen approach) Q1-2019

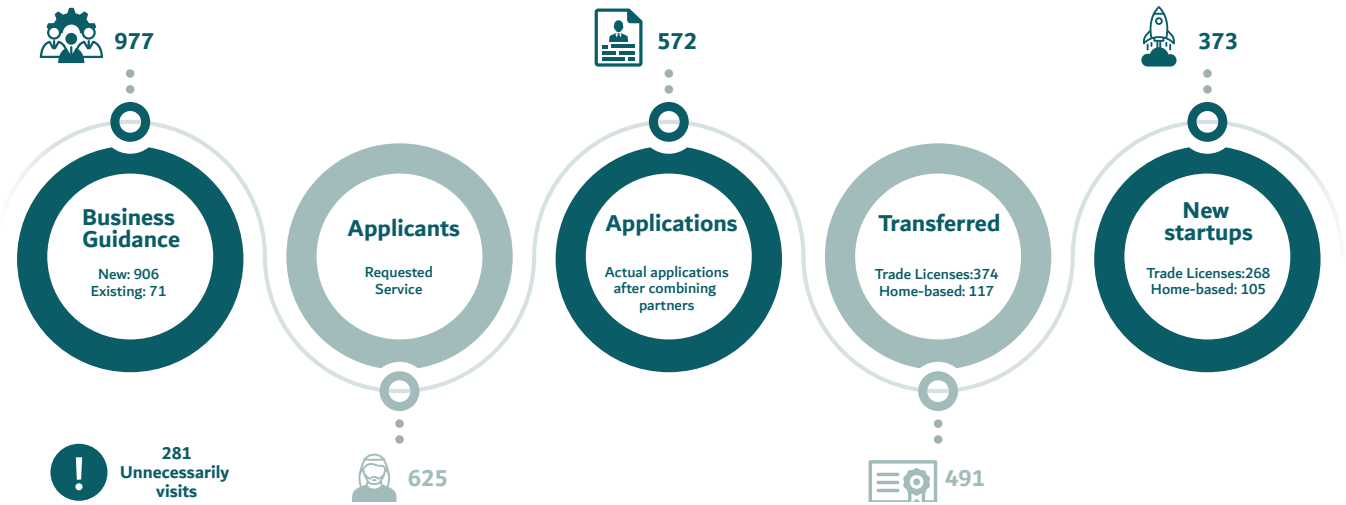


Figure 11.3: Kaizen approach to assess the steps and drops in the customer journey.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.2 Review

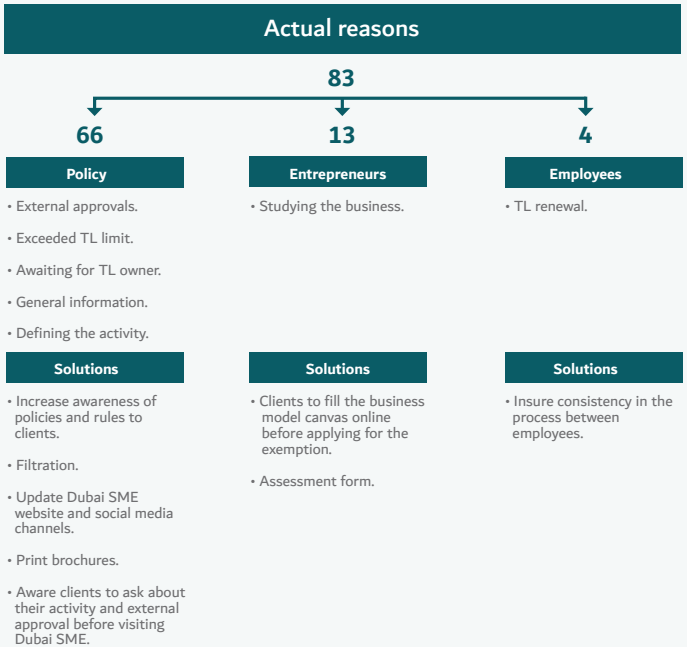


Figure 11.4: Categories and suggested solutions for the unnecessary visits to the Dubai SME Service Centre.

16 key performance indicators were identified so that performance could be tracked throughout the project. These measures were classified into strategic (2) (directly related to project aim); operational (2) (customer satisfaction); trackers: 12 (internal operational tasks), with monthly, quarterly or annual measurements recorded.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.3 Acquire

The Acquire stage began by developing the criteria for best practice research (refer to Figure 11.5). Best practice research was conducted by the benchmarking team and COER's researchers with 80 best practices identified in total.

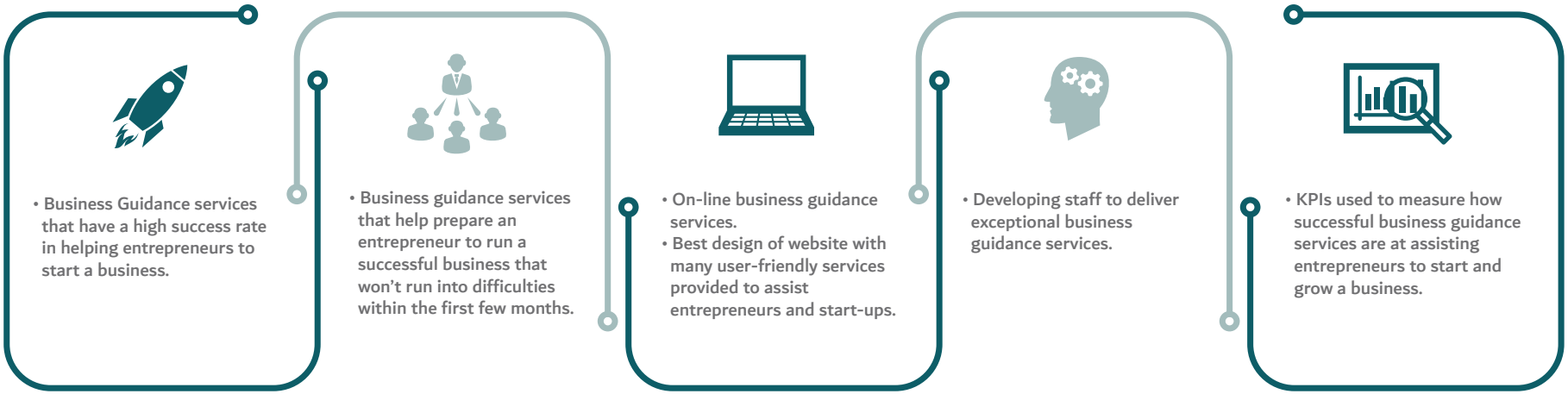


Figure 11.5: Dubai SME's areas of focus for benchmarking.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.3 Acquire

Best practices were scored individually based on ease of implementation, impact on the project, budget availability and management approvals and grouped into 7 areas and prioritised based on their scoring. Key stakeholders (such as the Entrepreneur's Development Department) provided their feedback on the scoring through focus groups. As indicated in Figure 11.6, "Qualifying/Assessment" of entrepreneurs and "Smart Customer Experience" were the priority areas to learn from best practices and implement in quarter 4 2019 whilst the other areas would be implemented in 2020.

Grouping	Scoring	Phases
Qualifying / Assessment	**8.40**	**Q4 2019**
Smart Customer Experience	**7.76**	**Q4 2019**
In-House Guidance	7.20	Q1 2020
External Advisory	7.20	Q1 2020
Employees Capability Development	6.92	Q2 2020
KPI's	6.80	Q3 2020
Financial Support	5.27	Q4 2020

Figure 11.6: Scoring methodology for the seven categories of best practice search results.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.3 Acquire

For Smart Customer Experience, the following portals were explored as they specialised in increasing customer happiness with a focus on artificial intelligence, online business guidance, online training, and online information availability: German Federal Ministry of Economics and Energy, Business Development Bank of Canada, Business Gateway (Scotland), Start-up India and Princes Trust UK. A Russian Small and Medium Business Corporation's SME Business Navigator tool, an online business calculator with dynamic data inputs integrated from around 70 government entities, offering up-to-date market intelligence data and a live business plan builder were found to be extremely beneficial (Figure 11.7).

For Qualifying/Assessment of entrepreneurs, websites of entities that use assessment tools to assess their entrepreneur's readiness to start businesses were researched; the team concentrated on the top-ranked countries in the Global Entrepreneurship Index which rates how individual countries across the world allocate resources to promote entrepreneurship. Desktop research was undertaken to explore the tools used by the Small Business Administration (USA), Innosuisse (Switzerland), Start-Up Denmark, Enterprise Ireland, and NMI (Iceland). Through questionnaires, the team further explored entities like Tamkeen (Bahrain), Support and Consultation Centre for SMEs (Hong Kong), and SME Corporation (Malaysia) that provide an Entrepreneurs Pre-assessment before an internal guidance service or referring them to external advisors. An in-house visit with Enterprise Singapore led to the idea of two initiatives for deployment: mentorship/coaching program involving successful members of Dubai SME, and external consultancy through accredited consultation firms (Figure 11.8).

Figure 11.7: Dubai SME Team during the Russian Small and Medium Business Corporation (RSMB) in-house visit.

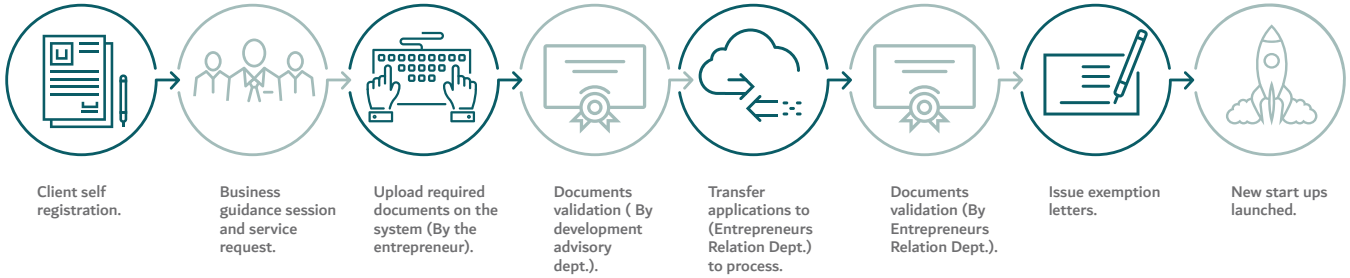
Figure 11.8: Dubai SME Team during the Enterprise Singapore in-house visit.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.4 Deploy

A total of 26 improvement ideas were recommended and approved for implementation – 10 in Qualifying/Assessment of entrepreneurs, and 16 in Smart Customer Experience. Two related quick wins were implemented from Jan 2019–Oct 2019. One was to simplify the application process for starting a business from 4.25 days to 1 day as illustrated in Figure 11.9. The other quick win was to improve customer experience with entrepreneurs being assigned an account manager to manage, track and process the application on their behalf from start to finish.

2018 Service Completion Time Average : 4.25 Days.



2019 Service Completion Time Average : 1 Day.

Figure 11.9: Simplifying the process to start-up a new business.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.4 Deploy

In addition, implementation of other best practices began such as developing an Entrepreneurs Pre-assessment Tool. This tool will link and align the entrepreneurs to the most appropriate program interventions based on their needs, and stage of their business ventures (Figure 11.10).

Stage A - Pre Assessment	User	Envisaged Output
• Dubai SME Program Introduction. • Demographics & Eligibility Questionnaire • Applicant Classification into Entrepreneur Personas. • Applicant ID and document checklist.	• Filled by Applicant. • 10 to 15 Minutes. • No Assistance Required.	Applicant Confirmation Receipt. Applicant Persona Classification.
Stage B - Needs Assessment	**User**	**Envisaged Output**
• Psychometric Questionnaire (34 Qs). • Needs assessment Questionnaire (15 Qs). • Type of Questions: A-Likert Scale (5 point & 7 point). B-Yes/No (2 point). C-Multiple Choice (4 point & 5 point).	• Filled by Applicant. • 15 to 25 Minutes. • No Need for Assistance.	Self Evaluation Scores. Applicant Needs.
Stage B - DA's Opinion	**User**	**Envisaged Output**
• Program Wise Assessment Questionnaire. • DA's Opinion on Applicant's Enterprising Capabilities and Orientation. • Applicant Scorecard Generation.	• Filled by DA. • 10 to 15 Minutes. • Post Meeting the Applicant.	Applicant Scorecard. Program wise Interventions report for DA.

Figure 11.10: Dubai SME Entrepreneur Assessment Tool (DA = Development Advisor).

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.4 Deploy

An important part of the pre-assessment is ensuring that entrepreneurs have the required competencies and capabilities to start a business. From benchmarking other tools, the benchmarking team identified the relative importance of personality, business acumen and commitment to business success (Figure 11.11). The team then ensured that these areas were included in their tool. The pilot phase for the tool in April 2020 was postponed due to the Covid-19 pandemic. Currently, a preliminary version of the tool is being used.

Personality	Business Acumen	Commitment
Personality Traits (using psychometric based parameterized scoring).	Competencies and skills, in relation to the proposed venture.	Entrepreneur's commitment to the venture.
	Entrepreneur's understanding of the intended business proposition.	
	Preparedness and seriousness of the entrepreneur.	

Themes	Weightages drawn from benchmarking	Parameters
Personality.	42%	Need for achievement, locus of control, entrepreneur self efficacy, innovativeness, risk attitude, openness, conscientiousness, extraversion, agreeableness, neuroticism.
Business Acumen.	38%	Professional education & training, professional experience, functional knowledge, business pulse, business education & training, business experience.
Commitment.	20%	Time, effort, financial dedication.

Figure 11.11: Key areas to include in an Entrepreneurs Pre-assessment Tool identified through benchmarking.

Other best practices in the process of implementation include a comprehensive platform offering market intelligence data and a live business plan builder, SME business navigator tool, plan for assessing entrepreneurs for external guidance referrals, and a certified business counsellor program.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.5 Evaluate

Within the time frame of one year, two quick wins led to significant improvements in performance with further improvements such as conversion rate (percentage of businesses launched) expected once other best practices have been implemented. Figure 11.12 summarises the improvements so far. The guidance service process cycle time to complete an application reduced from 4.25 days (29.75 hours) in 2018 to 1 day (7 hours) in 2019 saving employee time of the equivalent of AED 5,100,000 up to June 2020 and over AED 10,300,000 when considering time savings for clients.

Figure 11.12: Performance improvements so far due to the benchmarking project.

Employee satisfaction significantly increased to 88% with the new process, as against 30% with the old process. The reporting timing remarkably improved from 2 days to 1 Minute as the new system integrated different databases that were managed manually before.

Dubai SME: Improving Entrepreneurs' Start-Up Guidance and Support Services

11.5 Evaluate

The team received positive feedback from a large number of entrepreneurs on the enhancement in the processing time. There has been an increase in the level of entrepreneurs' happiness with the service information from 82.3% (Dec, 2018) to 86.5% (Dec, 2019) and delivery time from 83.6% (Dec, 2018) to 87.7% (Dec, 2019) and a stark reduction in the number of unnecessary visitors to the service centre from 30% to 0% (April 2020 onwards) as against the target of 5% (Dec 2020).

Other benefits have arisen from the project such as improving the competencies and experience of benchmarking team members in research skills, presentation skills and knowledge.

In addition, an important lesson for the team was to be open to collaboration opportunities so that the benefits of the project could be extended. For example, the team aligned its initiative with the principles of "The Fifty-Year Charter" that was declared by H. H. Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai enabling the team through the Dubai Future Foundation to extend its advisory and guidance services to students in 6 universities as part of the 'Alchemy Labs Initiative'. Finally, the team utilised its newly acquired benchmarking skills on TRADE to support a parallel project with another department to improve Dubai SME's Government Procurement Process.

Summary of project achievements of Dubai SME

Terms of Reference

Aim:

To improve the process of qualifying and supporting Emirati entrepreneurs to start viable businesses.

Review

Situation analysis:

Surveys, phone calls, open days and focus groups were used to obtain data and feedback on Dubai SME's business start-up service. Analysis included SWOT and fishbone analysis, root cause priority matrix, and process analysis using the Kaizen approach. Many challenges were identified such as service information not up to date, not meeting the service level agreement, inconsistent service information provided at different communication channels, limited knowledge of business advisors in the area of entrepreneurship and a weak entrepreneurship culture. Employees gave a 30% satisfaction rate for the existing process and there were 281 unnecessary visits by entrepreneurs to Dubai SME's service centre in quarter 1, 2019. The main challenges were grouped into issues concerning; service quality, speed of service delivery, and quality of information service.

Acquire

- **Methods of learning:** Desktop research, in-house site visits, questionnaires.
- **Number of best practices identified via desktop research:** 95.
- **Number of site visits:** 2.
- **Number of organisations interviewed (by site visit or phone calls):** 2.
- **Names of organisations interviewed (by site visit) and countries:** Russian Small and Medium Business Corporation, Enterprise Singapore.
- **Number of best practices identified via site visits:** 10.
- **Number of improvement ideas by the benchmarking team**: 10.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 115.
- **Number of best practices/improvements ideas recommended for implementation:** 26.

Summary of project achievements of Dubai SME

Deploy

- **Number of best practices/improvements approved for implementation:** 26.
- **Description of key best practices/improvements approved for implementation:** 1. Simplified application form to improve processing time 2. Improved registration and business start-up process by assigning account managers for entrepreneurs to improve customer experience 3. Entrepreneur's pre-assessment tool for needs-assessment 4. New entrepreneur guidance service process 5. New and updated Dubai SME brochure; published on the website to guide entrepreneurs and decrease the number of unnecessary visits 6. Social media campaigns to educate entrepreneurs on Dubai SME services and benefits 7. Readiness assessment guide to help entrepreneurs better understand their business readiness 8. Comprehensive platform offering market intelligence data and a live business plan builder 9. Online portal with resources, tools, and information for entrepreneurs to start their business 10. SME business navigator tool.

Evaluate

- **Key achievement:** 26 best practices approved for implementation with two quick wins implemented paving the way for a world-class business start-up service for Emirati businesses. The guidance service process cycle time to complete an application reduced from 4.25 days to 1 day, saving employee and customer time equivalent to AED 10,300,000 up to June 2020. Employee satisfaction with the new process increased from 30% to 88%. An entrepreneur pre-assessment tool is close to completion with other best practices to follow.

Non-financial benefits achieved within one year and expected future benefits:

Overall employee satisfaction significantly increased from 30% (old process) to 88% (new process).
The business advisor reporting timing improved from 2 days to 1 minute.
Improvement in the guidance service process, from 4.25 days (29.75 hours) in 2018 to 1 day (7 hours) in 2019 to complete a start-up application.
Increase in the level of entrepreneurs' happiness for service information from 82.3% to 86.5% and service delivery time from 83.6% to 87.7%.
Reduction in the number of unnecessary visits by entrepreneurs to the service centre from 30% to 0% (April 2020 onwards).
Future benefits are likely to be significant once all best practices are fully implemented.

Financial benefits achieved within one year and expected future benefits:

Estimated savings from employee-time-saved up to June 2020 was AED 5,100,000. Adding the time saved by clients results in a total of AED 10,300,000 savings.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	01 January 2019	01 February 2019	01 May 2019	01 August 2019	01 December 2019
Finish	19 March 2019	09 June 2019	30 September 2019	08 December 2019	12 December 2019

Chapter 12

General Directorate of Residency and Foreigners Affairs

Cooperative Integrated System

GDRFA: Cooperative Integrated System

General Directorate of Residency and Foreigners Affairs (GDRFA)'s benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (5-6 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER). This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 12.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awards GDRFA's team 5-6 Stars TRADE Certification.

12.1 Terms of Reference

Background:

The GDRFA – Dubai, is affiliated with the Federal Authority for Identity and Citizenship, and its mission is to regulate the entry and exit of international travellers to and from the Emirate of Dubai and to supervise the residency of foreign nationals. GDFRA consists of 5000 staff with 75 staff working under the departments of Strategy and Future Foresight, Innovation, PMO (Project Management Office), Business Process Management, and Excellence. In addition, seven Quality Sections in GDRFA's main Sectors are administratively under these departments' influence. An internal audit at GDRFA and a DGEP Report revealed the absence of an automated and unified system that integrates the main projects and operations from these key departments. The departments tended to work in silos with inefficient information and knowledge sharing. In addition, some projects were incongruent with the organisation's current and future strategic needs, subsequently leading to irrational expenditures and budget constraints.

Project Aim:

The project aim was to design a one-year roadmap that will lead to an effective Cooperative Integrated System (CIS) between GDRFA's Strategy, Innovation, PMO, Operations, and Excellence Departments in 2019 with full implementation achieved by December 2020.

GDRFA: Cooperative Integrated System

12.2 Review

Through extensive involvement of stakeholders and 7 brainstorming meetings, the team undertook a SWOT, fishbone and gap analysis to identify the barriers hindering the creation of a sound CIS, refer to Figure 12.2.

GDRFA Department	Current State	Desired State	Actions to Close the Gap
Strategy and Future Foresight	Poor communication. Lack of accurate information for decision making and future foresight scenarios.	Receiving integrated and accurate data for analysis and shaping accurate strategies, future scenarios, and programs, to lead the way to implementation through projects and application of international best practices.	Integrating the five departments to facilitate the flow of data to and from the strategy and future foresight department to allow it to release valuable information based on the analysis of data received by the other departments as well as acting as an input for shaping future foresight scenarios.
Innovation	Difficulty to access data to improve operations and services based on innovative techniques.	Integrated processes that facilitate incorporating innovation in all aspects of a process or a service.	Initiating and incubating innovative solutions to achieve strategic objectives by applying a home-grown process called Innovation Solutions Model as a funnel for governance to produce PMO prototypes.
Project Management	The Creative Projects Follow-ups from PMO are weak. Most projects charters aren't completed or monitored.	Creative projects follow up. Completed projects charter. Accurate criteria to evaluate projects.	Establishing a Creative Projects Committee to approve the projects using the EPM (Enterprise Performance Management) system to monitor and evaluate the progress (Projects Charter) of all projects.
Business Process Management	The absence of a system to document GDRFA's processes. Low documentation standards. The KPI's results are variable and inconsistent.	Professional system to document GDRFA's processes based on Best Practice. High documentation standards. Smooth operations and projects based on accurate measured KPIs and data.	Acquire and adopt an Architecture of Integrated information systems for processes documentation to integrate all departments related to evaluation and data collection to ensure gathering accurate data.
Excellence	Delay from Benchmarking partners related to site visits to acquire best practices related to the (Strategy and Future foresight, Innovation, PMO and Business process management). Lack of acquired international best practices due to complicated procedures.	Efficient benchmarking methodology and framework to acquire best practices. Improved operations and projects inspired by international best practices.	Deploying Desktop research and Smart webinars and conferences best practices for the selective stakeholders. Enhance official partnerships for exchanging knowledge and practices related to the selective stakeholders such as (Dubai Competitiveness Office and Federal authority of Competitiveness and Statistics).

Figure 12.2: Cooperative integrated system gap analysis.

GDRFA: Cooperative Integrated System

12.2 Review

This analysis revealed many shortcomings and the need for a more integrated approach to governance, strategy development and execution. As a result of this analysis the team developed the concept and definition for a Cooperative Integrated System - 'A Framework that integrates the futuristic vision of GDRFA with its strategic direction and utilizes innovation to continually improve its operations and services as well as project management to increase the efficiency and effectiveness of these functions; in addition, leveraging knowledge derived from the lessons learned through understanding the current situation and envisioning the future state to facilitate knowledge and data flow between all the GDRFA entities'.

Of key importance to the team was to measure the current level of institutional integration. This was found to be challenging. The team decided to collect a range of related measures and data, for example, the number of duplicated projects and the number of projects that related to strategic objectives. A key part of the Acquire stage would be to learn from other organisations on how to measure institutional integration.

GDRFA: Cooperative Integrated System

12.3 Acquire

The team developed the following criteria to select benchmarking partners: organisations with a high level of business excellence maturity as this would indicate high levels of integration, the existence of an enterprise resource planning system or a similar system that unifies and integrates process data, organisations strong in project management that manage multiple project portfolios, medium sized organisations with a complex business, and organisations that demonstrate rational spending. An intensive desktop research was undertaken with many best practices identified such as the benefits of using ARIS and Alfabet software to design, model and optimize business processes and manage project portfolios.

From the research and brainstorming 17 potential partners were shortlisted with four agreeing to a site visit. Prior to the visits a list of 14 key questions were developed that covered the topics of: strategic planning and future foresight, innovation, project management, operations, key performance indicators, IT integrated platforms and awards and excellence.

GDRFA: Cooperative Integrated System

12.3 Acquire

The GDRFA team conducted benchmarking visits at the following UAE government entities with a number of best practices identified:

- Dubai Statistics Center – Statistical integrated systems and predictive systems initiatives, refer to Figure 12.3.
- Abu Dhabi Digital Authority – Government integration, digital integration tools, design thinking lab and agility, refer to Figure 12.4.
- Dubai Economy – Strategy execution chain, operations and initiative execution, strategy integration/SAP platform, TRADE methodology and PMO methodology.
- UAE Telecommunications Regulatory Authority (TRA) – TRA Excellence Model, WOW factors to achieve excellence, ISO Robot to link processes to the strategic plan, project management, project evaluation matrix, operation plan development, KPI regulation, priority matrix and innovation themes.

Figure 12.3: Benchmarking visit to Dubai Statistics Center.

Figure 12.4: Benchmarking visit to Abu Dhabi Digital Authority.

Also, the team attended a workshop held by the Mohammed Bin Rashid Center for Innovation and learnt new ideas on how to improve and integrate its innovation system into its strategy and operations.

GDRFA: Cooperative Integrated System

12.4 Deploy

Of the 42 potential best practices for implementation, the team received approval from the Project Sponsor to implement 12 improvement ideas. The action plan involved a two-stage process. During the first stage, several quick wins were deployed as illustrated in Figure 12.5.

Figure 12.5: Quick wins in 2019.

These quick wins included:

- Organizational re-structuring with merging of the departments of Strategy and Future Foresight, Innovation, Projects Management, Operations, and Excellence under a Quality and Excellence Sector to remove duplication and establish defined roles and responsibilities.
- Formation of an Innovation Committee to classify ideas based on their influence, strategic correlation, and value. Innovative ideas are presented and approved and then transferred to an Innovation Accelerator Studio with the aim of designing and experimenting how they can be implemented utilising the RED methodology (research, experiments and development). After the ideas have been proven they are then passed to the Project Management Office for implementation and evaluation, refer to Figure 12.6.
- The team undertook a detailed project audit to identify the strategic alignment and success of current projects and eliminate duplicate projects.

GDRFA: Cooperative Integrated System

12.4 Deploy

For the second stage, the GDFRA team conceptualised how the CIS would work, refer to Figure 12.7, and identified future requirements in terms of processes, digitisation and organisational structure.

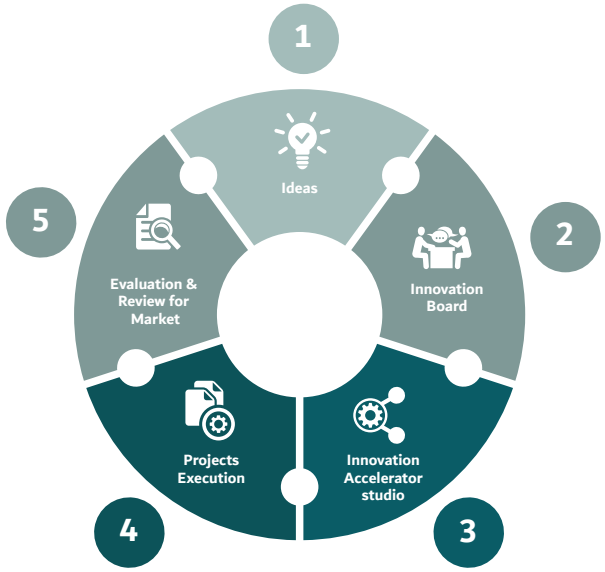


Figure 12.6: GDRFA Innovation Solution Model.

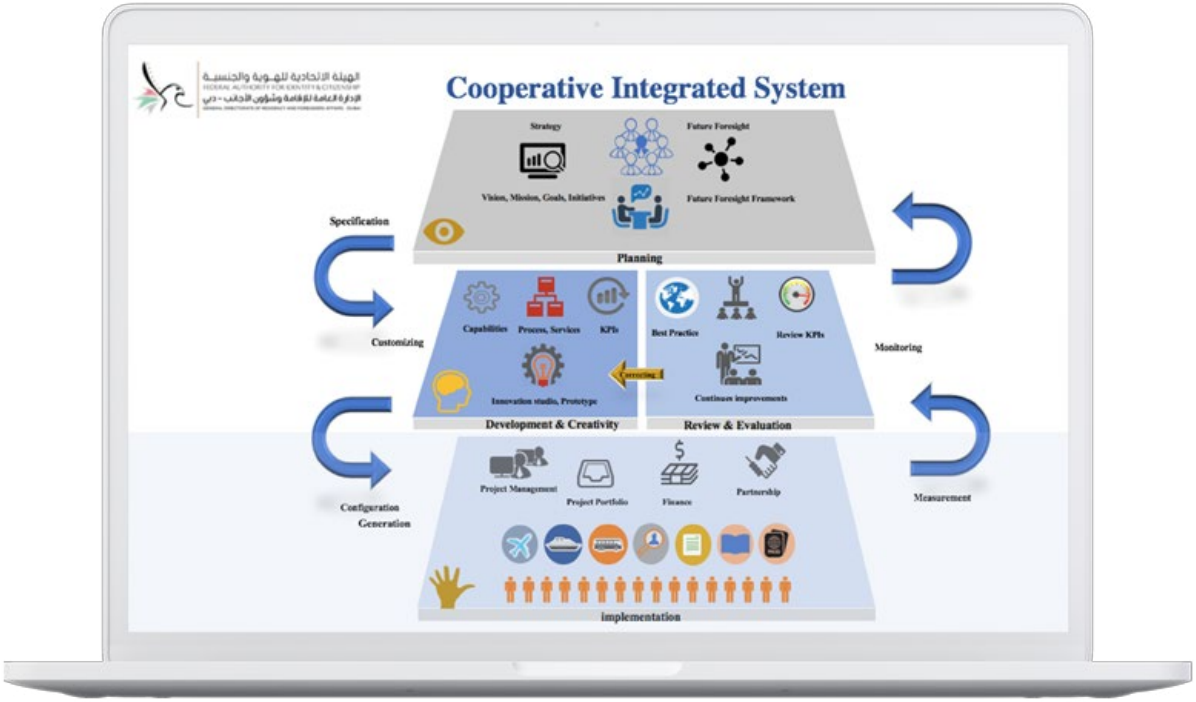


Figure 12.7: GDRFA's Cooperative Integrated System (CIS).

GDRFA: Cooperative Integrated System

12.4 Deploy

To implement the CIS a Master Plan for 2020 was developed (Figure 12.8).

This included the integration of key processes and projects through ARIS and Alphabet, training the process owners on ARIS and Alphabet and extending the integration with governance, risk management and knowledge management.

Other best-practice improvements planned include innovation project portfolio management to efficiently implement projects by allocating 70% resources for current targeted projects, 20% for business-related projects, and 10% for future foresight projects, the use of an Integrated Strategic Project Management Framework (ISPMF) to ensure that strategic initiatives are aligned with strategic objectives and the use of the APQC Process Classification Framework to assist in the designing of processes and objectively track and compare performance internally and externally with organizations from other industries.

Figure 12.8: GDRFA's CIS Master Plan 2020.

GDRFA: Cooperative Integrated System

12.5 Evaluate

The key achievement of the project was developing a plan for CIS and implementing several quick wins in 2019 with more substantial improvements planned for 2020. Figure 12.9 displays some of the performance measures used for GDFRA's projects and the progress achieved. Success included eliminating duplicated projects saving AED 1,500,000, a noticeable increase in the project charter quality from 50% to 100%, and increasing the number of innovation projects (one of which was the 'Smart Tunnel Innovation Project' at Dubai Airports, which resulted in a reduction in the waiting time for airport passengers from 5 mins to 10 secs).

PMR No.	GDRFA Department	Name of the measure (KPI)	2018	Target 2019	Actual 2019	Target 2020
1	Innovation	• Number of employees participated in innovation labs " The integrated cooperative system" theme and their ideas will be forwarded to the innovation projects portfolio	Not Measured	2000	3007	4200
2	Innovation	• Number of projects installed in "Innovation Project Portfolio"	0	0	34	43
3	Innovation	• Number of project prototypes	0	0	18	23
4	Innovation	• Number of overall received suggestion through smart suggestion system	5685	5000	7249	8000
5	Business Process Management	• Percentage of business process improvement	0	91%	96%	98%
6	Business Process Management	• Core operations maturity degree	59%	75%	84%	90%
7	Business Process Management	• Documenting of the business processes % (ARIS)	0	NA	100%	100%
8	Business Process Management	• Documenting of the support processes % (ARIS)	0	NA	95%	100%
9	Business Process Management	• Documenting of the administrative processes % (ARIS)	0	NA	100%	100%
10	PMO	• Number of open projects in GDRFA (yearly)	75	NA	34	43
11	PMO	• Saving from cancelling duplicating projects	0	0	1,547,828 AED	
12	Strategy/Innovation/PMO/ Business process management Excellence	• Number of innovative/foresight/partners projects that linked to strategic objectives	0	0	19	25
13	Strategy/Innovation/PMO/ Business process management Excellence	• Number of duplicated projects (Less is better)	20	0	7	0

Figure 12.9: CIS performance measures.

GDRFA: Cooperative Integrated System

12.5 Evaluate

In addition, GDRFA received recognition as a Certified Innovative Organization (CInOrg)® by the Global Innovation Institute (GInI)®. This allows GDRFA to train and conduct assessment sessions for other governmental and non-governmental entities in the field of innovation (Figure 12.10).

Figure 12.10: GDRFA - GInI® Certified Innovative Organization.

GDRFA also won the prestigious Richard Goodman Awards Strategic Planning Award - Government Organization (non-national) Category, 2019, from the Association for Strategic Planning, USA.

Summary of project achievements of GDRFA

Terms of Reference

Aim:

To design a one-year roadmap that will lead to an effective Cooperative Integrated System (CIS) between GDRFA's Strategy, Innovation, PMO, Operations, and Excellence Departments in 2019 with full implementation achieved by December 2020.

Review

Situation analysis:

The team conducted an extensive review of the issues that were impeding institutional integration. This involved SWOT and fishbone analysis, gap analysis, stakeholder workshops, and deciding on the most important performance measures for assessing the level of integration. The main areas of concern were a lack of integrated decision making between GDRFA's departments, the strategic plan not aligned with departmental objectives, lack of accurate information for decision making, future foresight and innovation, projects charters were not completed or monitored, low documentation standards for GDRFA's processes, variable and inconsistent operational KPI results, and lack of international best practices due to complicated procedures.

Acquire

- **Methods of learning:** Desktop research, site visits, workshop.
- **Number of best practices identified via desktop research:** 45.
- **Number of site visits:** 4.
- **Number of organisations interviewed (by site visit or phone calls):** 4.
- **Names of organisations interviewed (by site visit) and countries:** Dubai Statistics Center (UAE), Abu Dhabi Digital Authority (UAE), Dubai Economy (UAE), UAE Telecommunications Regulatory Authority.
- **Number of best practices identified via site visits:** 35.
- **Number of improvement ideas by the benchmarking team**: 17.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 97.
- **Number of best practices/improvements ideas recommended for implementation:** 12.

Summary of project achievements of GDRFA

Deploy

- **Number of best practices/improvements approved for implementation:** 12.

- **Description of key best practices/improvements approved for implementation:** Quick wins were deployed during the first stage of the project: 1. Merging of the departments of Strategy, Innovation, PMO, Operations, and Excellence under the Sector of Quality and Excellence 2. Formation of an Innovation Committee 3. Application of an innovation solution model to innovation projects 4. Application of the RED methodology to efficiently implement project prototypes 5. Enrolment of team members in project-related special courses 6. Creating an innovation project portfolio to increase the strategic link between projects. For the second stage, a CIS Master Plan was prepared for implementation in 2020 including: 1. Integration of data and processes through ARIS and Alfabet system software 2. Syncing the operational plans of the five departments 3. Utilising the APQC Process Classification Framework to objectively track and compare performance internally and externally 4. Introducing an Integrated Strategic Project Management Framework (ISPMF) to ensure that strategic initiatives are aligned with strategic objectives.

Evaluate

- **Key achievement:**
  Integration of the departments of Strategy, Innovation, PMO, Operations, and Excellence under the Sector of Quality and Excellence and the development of a CIS Master Plan for full implementation in 2020 with performance measures in place. Quick wins included cancelling duplicated projects leading to savings of AED 1,547,828, reducing the number of open (less value adding) projects from 75 to 34, 100% documentation of business and administrative processes, increasing the level of innovation activity (for example, 18 innovation project prototypes in 2019 compared to none in 2018) and receiving recognition by GInI® as a Certified Innovative Organization (CInOrg)® in 2019.

Non-financial benefits achieved within one year and expected future benefits:
Integration and alignment of five departments.
Development of a CIS Master Plan for 2020.
Increase in the quality of project charter documentation from 50% to 100%.
19 innovative/foresight/partner projects linked to strategic objectives in 2019.
100% documentation of business and administrative processes and 95% support processes in 2019 (ARIS) from 0% (2018).
15 GDRFA employees recognised as GIA Certified Strategic Planning Professionals (GIA-CSPP®).
Won the Richard Goodman Strategic Planning Awards – Government Organization (non-national) Category, 2019.
Recognised as a Certified Innovative Organization (CInOrg)® by the Global Innovation Institute (GInI)®, 2019.
Smart Tunnel Innovation Project at Dubai Airports resulted in a reduction in the waiting time for airport passengers from 5 mins to 10 secs.

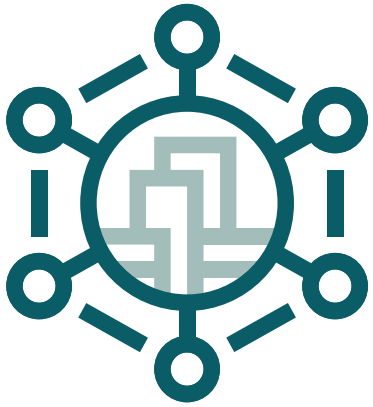
Financial benefits achieved within one year and expected future benefits:
The cancellation of duplicated projects led to savings of AED 1,547,828 in 2019.
Substantial productivity gains expected due to greater institutional integration and alignment to strategy supported by an enhanced innovative culture.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	18 February 2019	18 March 2019	02 June 2019	30 August 2019	1 December 2020
Finish	17 March 2019	12 May 2019	30 August 2019	1 December 2020	15 December 2020

Figure 12.11: Summary of project achievements of GDRFA.

Chapter

13



Roads and Transport Authority

Return on Innovation for Agile Innovation Journey

RTA: Return on Innovation for Agile Innovation Journey

Roads and Transport Authority (RTA)'s benchmarking team was awarded TRADE Benchmarking Proficiency with Commendation (5-6 Stars) by the Dubai Government Excellence Program (DGEP) and Centre for Organizational Excellence Research (COER). This chapter describes the benchmarking team's project and achievements for each stage of the TRADE Methodology.

Figure 13.1: HE Abdulla Albasti, Secretary General, The executive Council of Dubai, awrds RTA's team 5-6 Stars TRADE certification.

13.1 Terms of Reference

Background:

Established in 2005, RTA defines innovation as the catalyst for the creative change that drives RTA products, services, processes, and business models. RTA's innovation strategy and system aim to assist RTA in achieving three key objectives, refer to Figure 1.

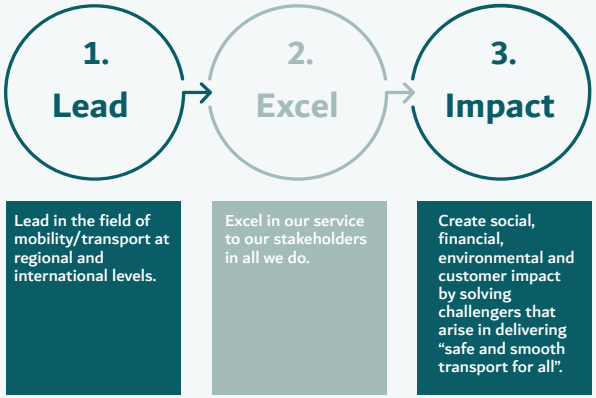


Figure 13.2: RTA's innovation strategy helping RTA to lead, excel and deliver Impact.

RTA: Return on Innovation for Agile Innovation Journey

13.1 Terms of Reference

Background:

RTA's innovation impact can be easily recognized through its leading position in several competitiveness indicators such as quality of roads, rating no. 1 worldwide for the years 2014 – 2017 and no.7 in 2019. Whilst innovation is important, RTA have faced challenges in measuring it and defining Return on Innovation (ROI). Given that RTA is a governmental organization, the financial impact is not the only or most important indicator to measure its success. There are non-financial impacts that RTA looks for to measure the success of its innovative projects such as people happiness, travel time index and no. of fatalities. Currently, RTA measures its innovation financial return through approved accounting principles, but the non-financial benefits are not easily measured and depend on professional judgment which may not be accurate. RTA had no unified framework, policy or process to define the non-financial benefit which made it difficult to accept or reject an idea or measure the impact of non-financial ideas.

It was for this reason the leadership requested that the Knowledge and Innovation Department (KID) investigate and develop a model for measuring ROI and at the same time ensure RTA's innovation framework, policies and culture supported RTA's desire for greater flexibility and agility in its decision making and processes.

Project Aim:

The aim of the project was to create and develop a reliable and simple framework for realising innovation benefits (termed as Return on Innovation (ROI)) to improve the innovation journey and make it more flexible and agile, based on best practices.

RTA: Return on Innovation for Agile Innovation Journey

13.2 Review

The benchmarking team's initial focus was to understand the current situation by conducting a review of all the documents related to RTA's innovation strategy, its innovation management policy and processes, and ideas management policy and processes. This was followed by one to one interviews and meetings with key stakeholders such as the innovation section team, idea management section team, enterprise project management officer, transport strategic planning department and customer happiness department. In particular, the benchmarking team collected data and obtained feedback on its idea management system consisting of:

- **Customer relationship management (CRM) system:** RTA's tool to gather innovation ideas from internal (employees) and external stakeholders (customers, partners).
- **Organizational project management system (OPMS):** RTA's tool to trace feasible ideas in the implementation phase.

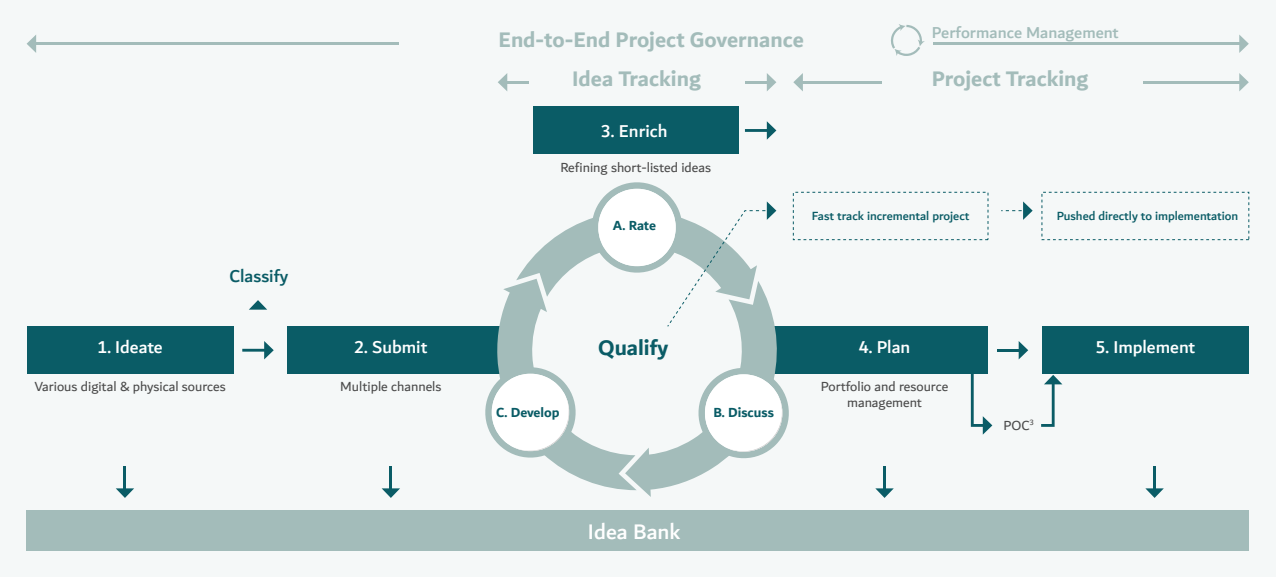


Figure 13.3: RTA's idea management system.

RTA: Return on Innovation for Agile Innovation Journey

13.2 Review

The team found out that the total number of ideas received in 2018 was 12,057 and the total number of feasible ideas was 764, which was 6.2% of the submitted ideas, refer to Figure 13.4. The large number of rejected ideas was a concern as it gave a negative indication of the quality of ideas as well as giving a substantial workload to subject matter experts who assessed them. The average response time for assessing the feasibility of ideas was 54 days instead of 30 days as per the service level agreement, indicating the need to reduce the response time if the innovation system was to be considered agile.

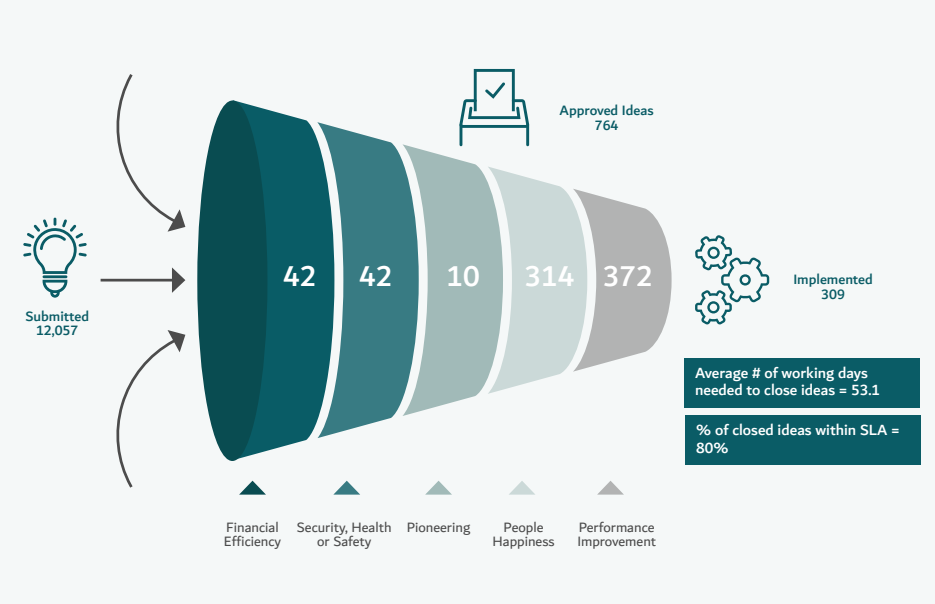


Figure 13.4: The number of ideas funneled through RTA's idea management system in 2018.

The team used SWOT and fishbone analysis, refer to Figure 13.5, to summarise the main issues that were affecting an agile innovation journey at RTA. These issues were much broader than requiring a ROI model and led the team to widen the scope of the Terms of Reference so that solutions to these issues could be found in the Acquire stage of TRADE.

RTA: Return on Innovation for Agile Innovation Journey

13.2 Review

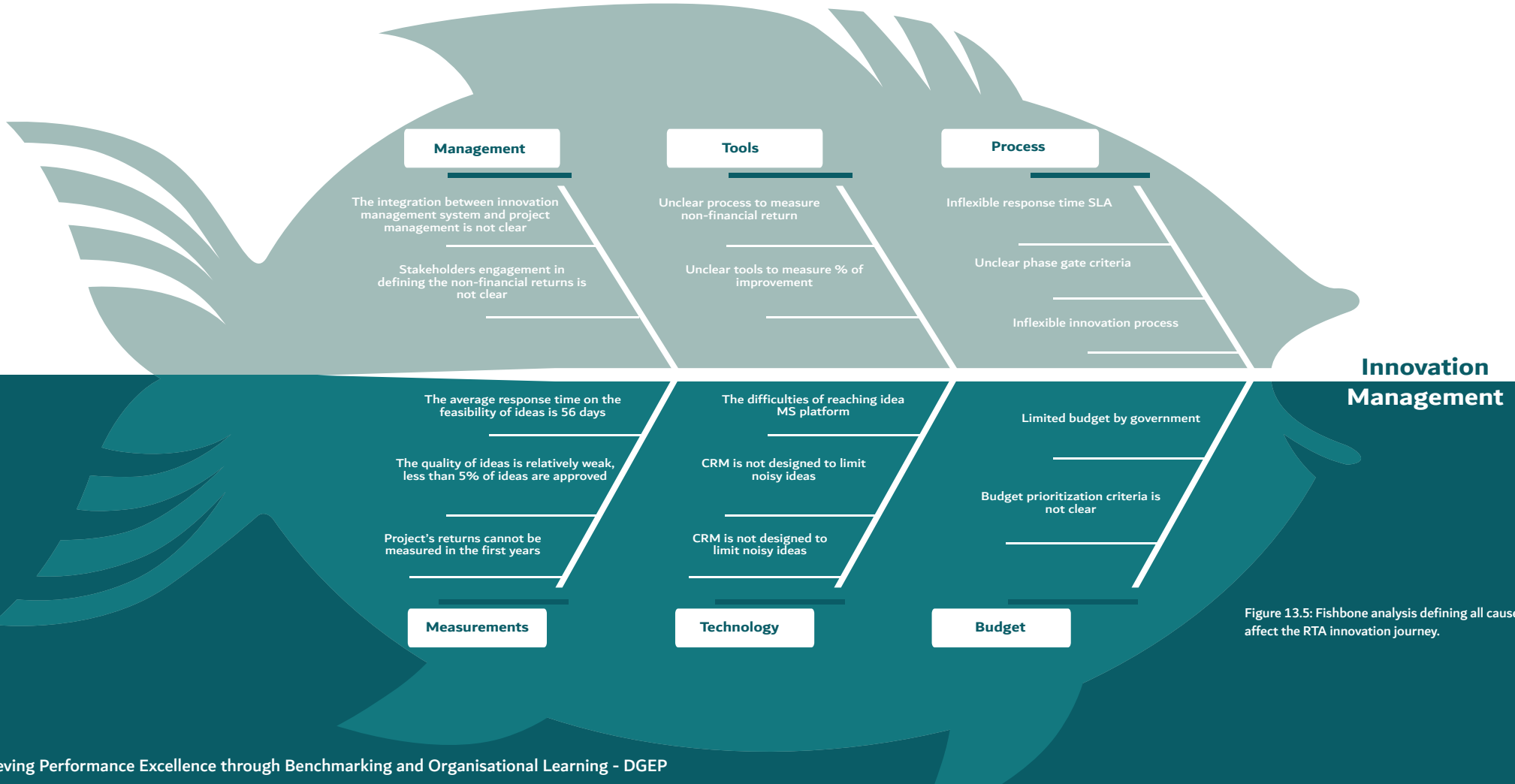


Figure 13.5: Fishbone analysis defining all causes that affect the RTA innovation journey.

RTA: Return on Innovation for Agile Innovation Journey

13.3 Acquire

The benchmarking team held a brainstorming session to define the best practice search criteria. These were identified as:

- Measuring organization innovation performance.
- Measuring the impact of innovation projects for non-financial and financial performance.
- Increasing the number of value-add ideas through appropriate training, communication and feedback on ideas.
- Approval processes for ideas that prioritise and fast-track value add ideas to be implemented.

The benchmarking team searched for best practices and improvement ideas through desk-top research, benchmarking visits, and stakeholder engagement and brainstorming sessions, refer to Figure 13.6.

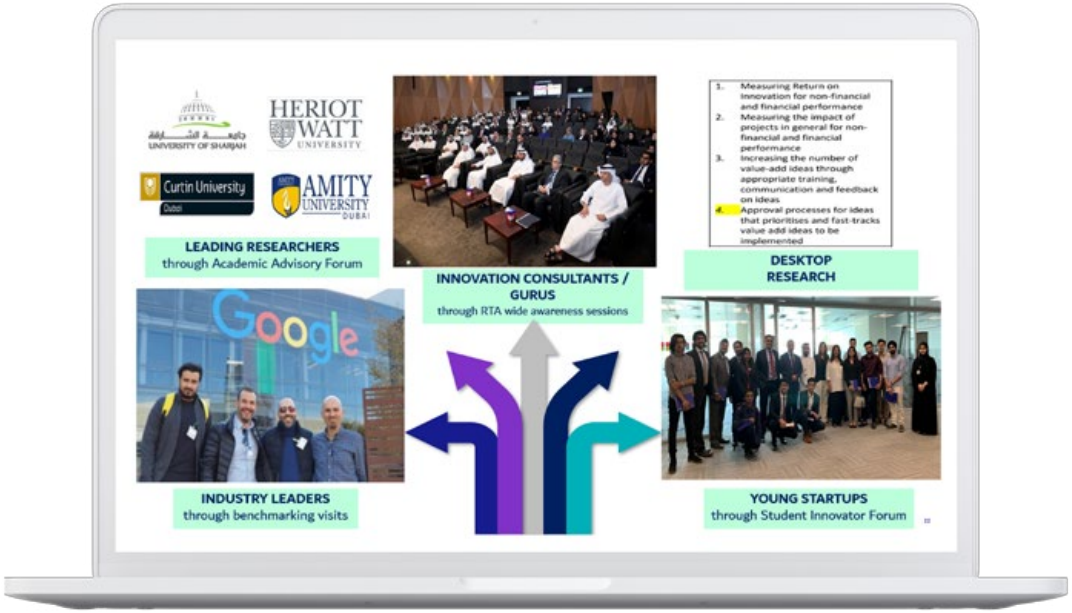


Figure 13.6: RTA channels for best practice learning.

RTA: Return on Innovation for Agile Innovation Journey

13.3 Acquire

One of the key findings from the desktop research was the concept of social return on investment, which is about incorporating social, environmental, and economic costs and benefits in the system. Mature and successful innovation organizations focus on finding the right balance between input and output metrics, qualitative and quantitative metrics, as well as risk, uncertainty and revenues.

The benchmarking team conducted an impressive 27 benchmarking visits. Before the visits, the team developed a set of questions to guide the team but with the flexibility to change the line of questioning based on the situation and responses given. In the UAE, two organisations were visited; the team learnt from Beehive (UAE) how they measured the return on innovation through considering its contribution to achieving strategic objectives and from Emirates (UAE) the team learnt that 20% of its annual budget was directed towards innovation and they develop a business model for each idea to assess its relevance and potential ROI.

25 benchmarking meetings were conducted with leading organisations in the United States across 3 cities in 10 days, refer to Figure 13.7. The team learnt many best practices related to innovation management systems in addition to ROI. At the Seattle Department of Transportation, the team gained knowledge about the environmental sustainability measures that are key indicators of an innovation's success and which are also relevant to RTA. A significant contribution from both Shell TechWorks and Google was that any non-financial ROI should relate to a financial benefit and the importance of capturing user experience to identify innovation opportunities.

RTA: Return on Innovation for Agile Innovation Journey

13.3 Acquire

From other visits the team learnt a variety of ways to measure the quality of ideas and learnt the importance of prioritizing innovative ideas based on their alignment to strategic goals as this wins senior management support and enables operational teams to decide which projects to pursue.

Categories	Who did we meet? Transport Focused	Who did we meet? Other Industries
Academia & Experts	MITei MIT Energy Initiative; University of Washington; Berkeley;  Timothy Papandareo;  Scott Kubly	
Innovation Ecosystems	PROSPECT Silicon Valley; Institute for Human Centered Design	Sf Silicon Foundry; IXL CENTER; PLUGANDPLAY; innuovo; cic
Public Sector	Seattle Department of Transportation; Santa Clara Valley Transportation Authority	
Innovation Centers	PIAGGIO FAST FORWARD; INTELLECTUAL VENTURES; GOODYEAR	Google; BOUYGUES; Shell TechWorks
Start Ups	WeRide; BLUESPACE; POPULUS; fka; Zendrive; next; LYT.; Replica	

Figure 13.7: RTA's international benchmarking visits (USA).

RTA: Return on Innovation for Agile Innovation Journey

13.3 Acquire

A unique approach used by the benchmarking team to capture ideas on how to improve RTA's innovation system consisted of organising workshops and brainstorming sessions with various stakeholders. These consisted of:

- A co-creation workshop facilitated by Amity University, Dubai, to determine a definition for ROI and how non-financial ROIs are defined. The workshop was conducted with the participation of other UAE government entities and members of the community to enrich the thought process and inputs on ROI, refer to Figure 13.8. This workshop provided support that non-financial returns should be classified into 3 main categories (economic, social and environment returns).
- Innovation Consultants/ Gurus were invited to speak at an "Innovation & Future Hour". The focus was on how innovation leads organizations to change, how the innovation process can be agile, how to measure innovation success and what non- financial returns mean and how they can be measured. One of the findings was that an innovation portfolio needs to be balanced with a variety of innovative projects meeting different time horizons and scenarios.
- A Young Entrepreneurs Forum was set-up to gain the perspective of young start-ups/ student innovators from 5 different universities. The forum was a 90 min round table discussion involving the team members from RTA. The main discussion questions were what innovation means to them, how they define their targets and how they measure their success. From a start-ups point of view, ROI meant the number of new succeeded services and products, and new revenues generated.

Figure 13.8: RTA's co-creation workshop.

RTA: Return on Innovation for Agile Innovation Journey

13.4 Deploy

The benchmarking team created a task force team to review all the learnings from the Acquire stage. A meeting with the Project Sponsor was held to define improvement opportunities, based on which 11 ideas were approved for implementation out of the 17 recommended best practices, and 6 have been deployed so far. The 11 best practices approved for implementation were:

- Innovation and future framework.
- Innovation management policy (updated version). Idea management system policy (updated version). Project management policy (updated version).
- Non-financial benefits identification framework.
- Stakeholders engagement MoM.
- ROI calculation formulas.
- Project selection and prioritization criteria.
- Project portfolio and proposed response time.
- Incentives and rewards policy (updated version).
- Proposal for new incentives and rewards framework.

An innovation and future framework, Figure 13.9, was developed to explicitly show how RTA's innovation activities were related and added value. The framework defines the inputs and outputs and combines future shaping, strategic planning and innovation.

The integration between the three components ensures that RTA's innovation portfolio achieves its ambition to achieve strategic objectives, meet stakeholders needs and expectations and creates a value proposition that keeps RTA in a pioneering position.

RTA: Return on Innovation for Agile Innovation Journey

13.4 Deploy

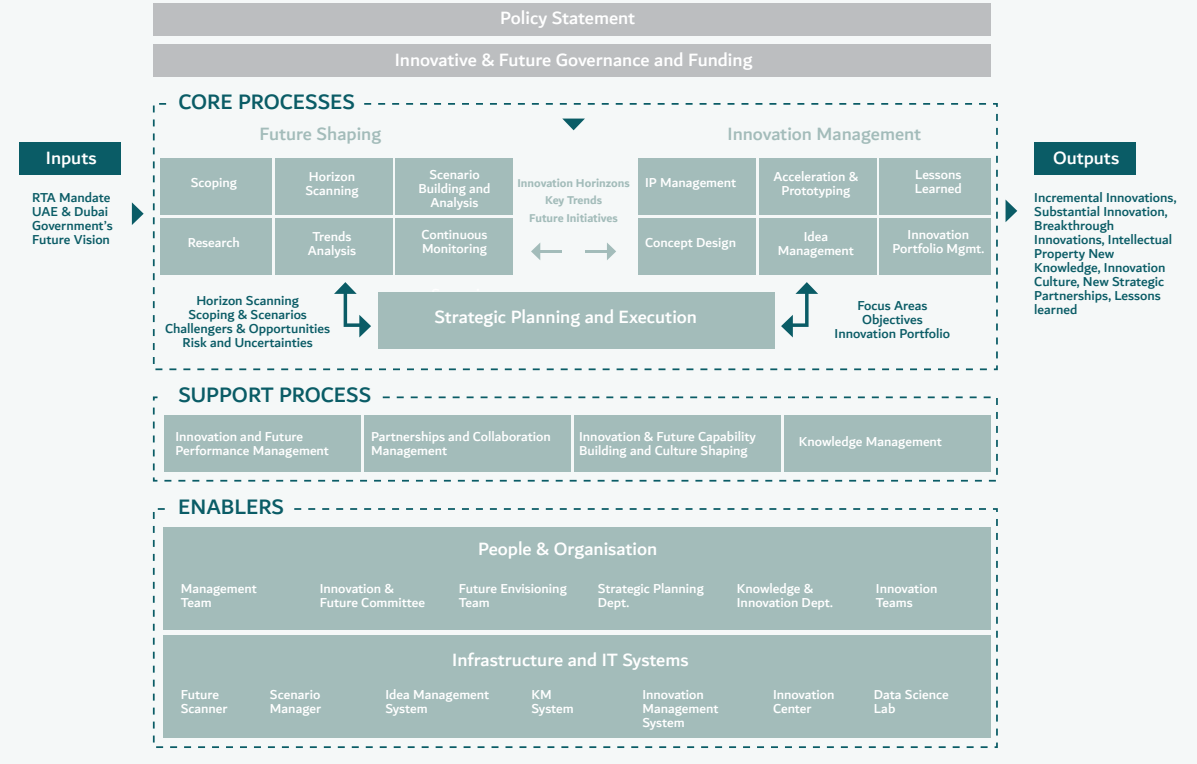


Figure 13.9: RTA's innovation and future framework.

The benchmarking team revised RTA's innovation management system (policies, processes and forms) with an updated innovation policy, idea management policy, and project management policy. Supporting this, the innovation management section has a new role in evaluating and prioritizing innovative ideas based on predefined criteria that are in alignment with strategy, innovation focus areas, the complexity of implementation, associated risk, and return on innovation (financial and non-financial benefits). In coordination with the Knowledge and Innovation Department, the benchmarking team members succeeded in obtaining ISO 56002 certification for RTA's innovation management system in December 2019 through the Bureau Veritas third-party certification body.

RTA: Return on Innovation for Agile Innovation Journey

13.4 Deploy

A SABER ideas management platform was developed to replace the ideas management platform (CRM). This was designed to be more user-friendly, increase the percentage of feasible ideas and quality of submitted ideas, decrease the percentage of noisy ideas, keep all stakeholders engaged in the ideation process, and make the evaluation process easier. To submit an idea, SABER (Figure 13.10) has a drop-down list of RTA's goals, strategic objectives, and services. The idea creator is asked to submit the challenge, solution, and impact.

RTA has defined a list of non-financial benefits, and plans are ongoing for a drop-down menu for the list. The benchmarking team developed and implemented a systematic process for defining the non-financial benefits from an innovation project. 50 potential non-financial benefits were approved with some listed in Figure 13.11. The challenge in developing these benefits was to reduce or remove subjectivity and so to solve this problem a registration card has been developed for each benefit that defines how the benefit is quantified.

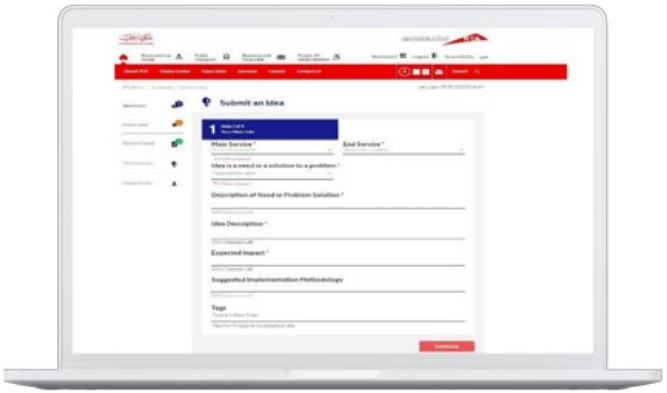


Figure 13.10: SABER ideas management platform.

#	Definition	Prioritization Criteria Reference	
B01	Travel time savings	4.2.1 Sustainable network and systems 4.3.1 Travel time index of the project impact area	Detailed benefit cards available on Appendix 3, which can be accessed through links on Benefit #
B02	Increase in travel time reliability	4.3.2 Transportation system reliability	
B03	GHG emission reduction	5.2.4. Environment sustainability	
B04	Decrease in accidents	5.1.1. Improvement of safety	
B05	Decrease in fatalities	5.1.1. Improvement of safety	
B06	Improve Level of Service (LOS)	5.1.1. Improvement of safety	
B07	Improve accessibility	4.2.1. Sustainable network and systems	
B08	Reduction in energy consumption	4.2.1. Sustainable network and systems	
B09	Increase in private sector investments	5.2.1. Energy Consumption	
B10	Increase in PT ridership	6.2.1. Finanncial Efficiency 4.1.1. Public Transport Ridership	

Figure 13.11: A part of RTA's list of non-financial benefits for ROI.

RTA: Return on Innovation for Agile Innovation Journey

13.4 Deploy

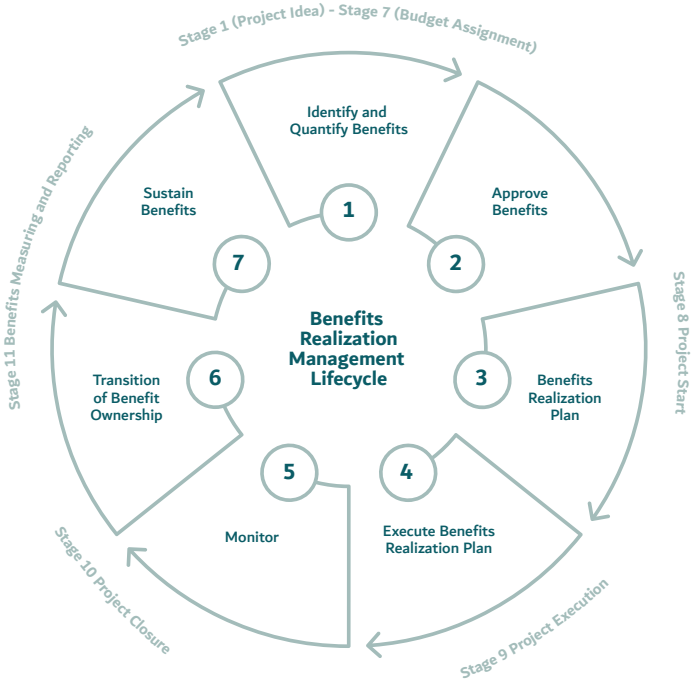


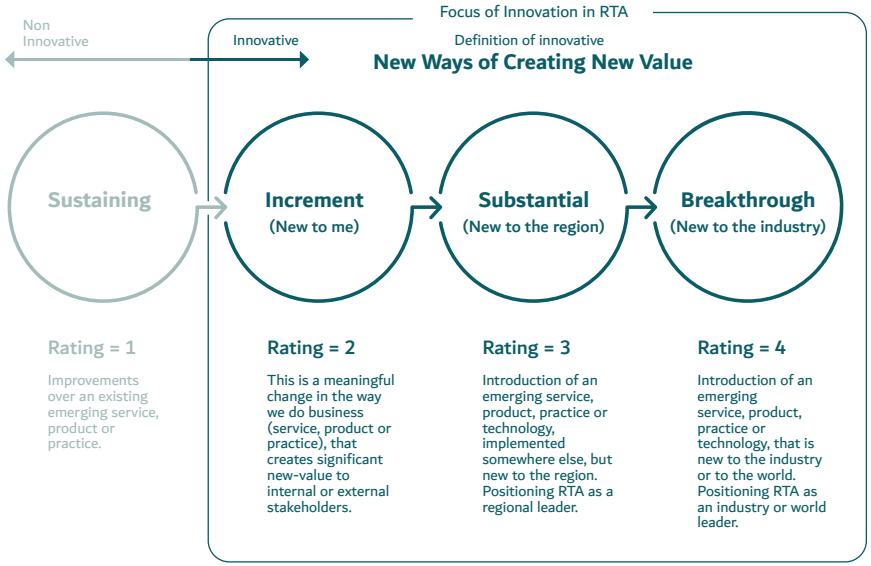
Figure 13.12: RTA's framework for predicting non- financial returns.

Figure 13.12 shows the overall system for measuring non-financial returns and unifying the method for measuring ideas and innovation projects so that ROI can be calculated.

To reduce the response time for assessing the feasibility of ideas and support agile decision-making, RTA now classifies ideas as sustaining, incremental, substantial, or breakthrough, refer to Figure 13.13. Using this approach, the benchmarking team reviewed 652 innovative projects between 2015 and 2019 and identified that the response time for assessing incremental innovative ideas was on average 15 days whilst the response time for substantial and breakthrough projects was more than 30 days. This information enabled the team to make changes to the innovation system and introduce different innovation pipelines and target response times based on the type of innovation, refer to Figure 13.14.

RTA: Return on Innovation for Agile Innovation Journey

13.4 Deploy



Level of Uniqueness	The idea is necessary to maintain the business as usual	Improvement over an existing practice	The idea has not been implemented in region	The idea has not been implemented in the industry or the world
Level of Disruption To Existing Business Models	Maintains the existing business model	Improves the existing business model	Introduces a new business model to the region	Introduces a new business model to the industry
Alignment with RTA Objectives	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
Alignment with RTA Innovation Focus Areas	○ ○ ○ ○	● ● ○ ○	● ● ● ○	● ● ● ●
Impact on Dubai/UAE Innovation Agenda	○ ○ ○ ○	● ○ ○ ○	● ● ● ○	● ● ● ●
ROI	○ ○ ○ ○	● ○ ○ ○	● ● ○ ○	● ● ● ○

Figure 13.13: Classification criteria for RTA innovation projects across three levels of disruption.

Type of Pipeline	Timeframe	Sponsors	Resources	Decision Right	Investment
Incremental (Just-do-it)	7-15 days	Individual	Individual/self forming teams	Individual	Time
Substantial	weeks-months	Manager	Assigned teams within a function	Manager	Time + Nominal Budgets
Breakthrough	Months-years	CEO/Board	Dedicated cross-functional business teams	BU heads	Time + Cutting across multi budget periods

Figure 13.14: Assessment response times and resources based on innovative type.

RTA: Return on Innovation for Agile Innovation Journey

13.5 Evaluate

The prime outcome from the benchmarking project was the development of an innovation management system that integrates future shaping, strategy and innovation and measures ROI and supports innovation agility. RTA is the first Dubai Government entity to create a systematic tool to measure non-financial ROI, applicable to any private or governmental organization.

Some early achievements from the project include:

- Certification of the innovation management system to ISO 56002 in December 2019.
- An increase in innovation maturity from 77.8% in 2018 to 82.9% in 2019.
- A decrease in the response time to assess incremental ideas from 54 days to 15 days.

In the long term the effectiveness of the new integrated innovation portfolio is expected to fulfil RTA's strategic objectives, meet stakeholders' needs and expectations. Financial benefits are expected to be significant with stakeholders expected to submit higher quality ideas supported by a more agile, responsive and effective innovation management system.

Summary of project achievements of RTA

Terms of Reference

Aim:

To create and develop a reliable and simple framework for realising innovation benefits (termed as Return on Innovation (ROI)) to improve the innovation journey and make it more flexible and agile, based on best practices.

Review

Situation analysis:

SWOT and fishbone analysis highlighted that the integration between RTA's innovation management system and project management was not clear, and the alignment between future foresight, strategic planning, and innovation needed clarification. 12,057 innovative ideas were submitted in 2018 through RTA's idea management system (CRM). An idea rejection rate of 94% gave a negative indication of the quality of ideas. The CRM was not designed to limit noisy ideas which constituted 34% of the total submitted ideas in 2018. This resulted in a substantial workload for the subject matter experts, affecting the quality of their decision. The average response time on the feasibility of ideas was 54 days instead of the service level agreement of 30 days. Ideas were not evaluated based on their risk and return but depended upon subjective professional judgment.

Acquire

- **Methods of learning:** Desktop research, site visits, academic advisory forum, student innovator forum, specialised sessions by innovation consultants, co-creation workshop.
- **Number of best practices identified via desktop research:** 62.
- **Number of site visits:** 27.
- **Number of organisations interviewed (by site visit or phone calls):** 27.
- **Names of organisations interviewed (by site visit) and countries:** Beehive (UAE), Emirates (UAE). International visits (US) – selected examples: Shell TechWorks, Google, City of Boston's Transportation Department, Seattle Department of Transportation, Santa Clara Valley Transportation Authority, Good Year, Silicon Foundry, Plug and Play, Innuovo, Institute for Human Centred Design and Intellectual Ventures.
- **Number of best practices identified via site visits:** 18.
- **Number of improvement ideas by the benchmarking team**: 10.
- **Total number of best practices/ideas reviewed (desktop research, site visits & ideas):** 90.
- **Number of best practices/improvements ideas recommended for implementation:** 17.

Summary of project achievements of RTA

Deploy

- **Number of best practices/improvements approved for implementation:** 11.

- **Description of key best practices/improvements approved for implementation:** 1. Developed an innovation and future framework integrating future-shaping, strategy planning, and innovation components. 2. Updated innovation management policy. 3. Updated idea management system policy. 4. Updated project management policy 5. Updated the idea management platform from CRM to SABER. 6. Stakeholders engagement MoM. 7. Developed a systematic approach for predicting non-financial ROI and approved a list of 50 non-financial benefits. 8. Devised an ROI measurement framework and 'benefit registration card' to measure the non-financial ROI. 9. Innovation projects classified into three categories for agile response time for feasible ideas (incremental - 15 days; substantial and breakthrough - more than 30 days). 10. Update the rewards and incentives policy. 11. Propose an incentive and reward scheme for the ideas submitted.

Evaluate

- **Key achievement:** The development of an innovation management system that integrates future shaping, strategy and innovation and measures ROI and supports innovation agility. The first to develop within Dubai government a systematic tool to measure non-financial ROI - applicable to any private or governmental organization. Strong project engagement with innovation consultants, subject matter experts, professors from various universities, leading researchers, young entrepreneurs, other UAE government entities, and community members.

Non-financial benefits achieved within one year and expected future benefits:
Development of an innovation management system that integrates future shaping, strategy and innovation and measures ROI and supports innovation agility.
Certification of the innovation management system to ISO 56002 in December 2019.
Increase in innovation maturity from 77.8% in 2018 to 82.9% in 2019.
Decrease in response time to assess incremental ideas from 54 days to 15 days.

Financial benefits achieved within one year and expected future benefits:
Financial benefits are expected to be significant with stakeholders expected to submit higher quality ideas supported by a more agile, responsive and effective innovation management system.

Status of Project	Terms of Reference	Review	Acquire	Deploy	Evaluate
Start	March 2019	April 2019	July 2019	October 2019	December 2019
Finish	April 2019	July 2019	October 2019	December 2019	June 2020

Chapter 14

Recognition Awarded to Project Teams

Recognition Awarded to Project Teams

The Excellence Makers projects were closely monitored throughout the year with assistance and encouragement given. The key milestones were the four Knowledge Sharing Summits. On each of these days, the teams would come together and give presentations on the progress of their projects to encourage sharing and learning between the teams.

14.1 Knowledge Sharing Summits

The first Summit was held in April 2019, the second in July 2019, the third in October 2019, and the Final Summit in December 2019 (Figures 14.1 to 14.4). During each Summit, all the benchmarking teams delivered a 10-minute presentation showcasing their progress, challenges, and achievements so far. Furthermore, the teams were provided with an interactive opportunity where they mixed with other teams to share ideas and learning (Figure 14.5 to 14.7). In some instances, this resulted in some of the government entities becoming benchmarking partners.

Figure 14.1: Dr. Zeyad Mohammad El Kahlout, Senior Quality and Excellence Advisor, DGEP, addressing the audience during the 1st Knowledge Sharing Summit, held in April 2019.

Figure 14.2: The teams presented their progress so far at the 2nd Knowledge Sharing Summit, held in July 2019.

Recognition Awarded to Project Teams

Figure 14.3: An insightful day, where the teams braced themselves for the final stages of their projects at the 3rd Knowledge Sharing Summit, held in October 2019.

Figure 14.4: The organising team from DGEP and COER along with the judges at the Final Knowledge Sharing Summit, held 22 December 2019.

Figure 14.5: Ad hoc team formation during the Summit to promote the sharing of ideas based on their experience and expertise.

Figure 14.6: All the teams had an opportunity to learn from the formal and informal cross-pollination of ideas during the Summits.

Figure 14.7: The interactive Question and Answer sessions during the Summits benefited the government entities through collective learning.

Figure 14.8: The official '2nd Cycle DWL Book Launch Ceremony' held at the Final Summit; an enlarged representation of the book.

Recognition Awarded to Project Teams

14.2 Final Knowledge Sharing Summit Recognition

Signifying the conclusion of the 3rd Cycle of the Excellence Makers Program, the Final Knowledge Sharing Summit was held on 22 December 2019, Jumeirah Emirates Towers Hotel, Dubai. It represented the termination of the ongoing association of the current projects with team COER and DGEP. The Final Summit was attended by the ten teams, their guests, sponsors, DGEP executives, and COER members.

Since the essence of each project was diverse, the teams were at different stages of TRADE at the last signpost of the Final Summit. While all the projects had completed the Acquire Stage of TRADE, most were in the Deploy Stage with teams implementing between 10 to 40 practices of varying complexity. In parallel, teams were monitoring performance achieved to-date through the Evaluate Stage. All the teams had implemented some quick win best practices. For example, CDA had implemented an impressive 32 quick wins ranging from a Happiness Wheel and Happiness Cards to breakfast with the Director General and the introduction of flexible working hours. These quick wins were going to be cemented and enhanced in 2020 with more substantial practices.

The ten projects were meticulously examined by a panel of judges (Figure 14.10) for the quality of their current and future deliverables. TRADE Star Certification was given based on each team's 10-minute presentation, their Benchmarking Report, and supporting documentation. The projects were assessed using the TRADE Certification Scheme (Figure 14.11).

Figure 14.9: Dr. Robin Mann, Director, Centre for Organisational Excellence Research (COER) congratulated the project teams for their exceptional performance during the 3rd Cycle of Dubai We Learn.

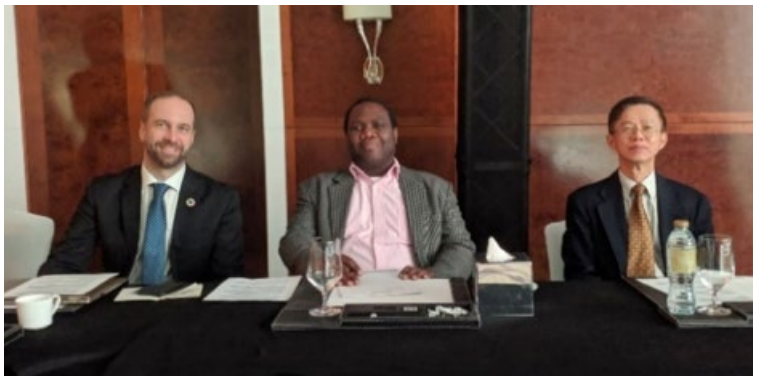


Figure 14.10: The Judging Panel, Dubai We Learn 2019 (L to R) Arndt Husar, Senior Public Management Specialist (Digital Transformation), Asian Development Bank, Philippines, Professor Dotun Adebanjo, University of Greenwich, United Kingdom, Dr. Woon Kin Chung, Previous Head of Singapore's Productivity Centre, Singapore.

Recognition Awarded to Project Teams

14.2 Final Knowledge Sharing Summit Recognition

Assessment grades	Certificate awarded	Explanation
7 Stars ★★★★★★★	TRADE Benchmarking Proficiency Certificate *with Commendation.*	Role Model, World-Class, Wow! (Across 3 or more TRADE stages)
5 to 6 Stars ★★★★★★	TRADE Benchmarking Proficiency Certificate *with Commendation.*	Excellence, Outstanding, Exceeds Expectations (Across 3 or more TRADE stages)
3 to 4 Stars ★★★★	TRADE Benchmarking Proficiency Certificate.	Competent, Professional (Across 3 or more TRADE stages)
1 to 2 Stars ★★	Incomplete.	Deficient, Incomplete (Across 3 or more TRADE stages)

Figure 14.11: TRADE Benchmarking Certification levels.

Dr. Hazza Al Nuaimi, Coordinator General – DGEP, inspired the audience with his Welcome Address at the Final Summit (Figure 14.12). The certification results were announced in the august presence of His Excellency Abdulla Al Basti, Secretary General, The Executive Council, Dubai as he presented the trophies and TRADE Star Certifications to the teams (Figure 14.13).

Figure 14.12: Dr. Hazza Al Nuaimi, Coordinator General – DGEP, during his Welcome Address at the Grand Finale.

Figure 14.13: His Excellency Abdulla Al Basti, Secretary General, The Executive Council, Dubai, with all the teams to symbolise the closing of Dubai We Learn, 2019.

Recognition Awarded to Project Teams

14.2 Final Knowledge Sharing Summit Recognition

The purpose of the Excellence Makers Program had been to support the Dubai Government entities on a learning journey through the utilisation of the TRADE Benchmarking Methodology. It offered an opportunity to discover, adapt, innovate, and customise best practices to achieve accelerated and dramatic improvements in government performance. The Final Summit helped gauge if the program's objectives had been met.

It is laudable that within the shortened 10-month timeframe (due to the planning for Dubai Expo 2020), the project teams accomplished levels equal to or higher than 3 to 4 Stars. This transpired into all the benchmarking team members achieving the TRADE Benchmarking Proficiency – Silver Level – a major achievement within such a short-time frame. At the ceremony three teams achieved 7-Stars, four teams 5 to 6 Stars, and three teams 4 Stars recognition.

Following on from the ceremony, teams were encouraged to reapply for TRADE Star Certification in July 2020, giving them more time to deploy their best practices and evaluate their project's success. Four team's resubmitted despite the challenges they were facing during the COVID-19 Pandemic. In total, five teams were awarded 7 Stars recognition: these were Dubai Corporation for Ambulance Services, Dubai Electricity and Water Authority, Dubai Municipality, Dubai Police, and Dubai SME.

There were four recipients of 5 to 6 Stars recognition, Community Development Authority, Dubai Health Authority, General Directorate of Residency and Foreigners Affairs, and Roads and Transport Authority. Dubai Land Department achieved 3 to 4 Stars recognition; an admirable achievement with the team launching its smart valuation system for property units in September 2020 just outside the time period when projects were re-assessed. Figure 14.20 depicts the level of recognition received by each team.

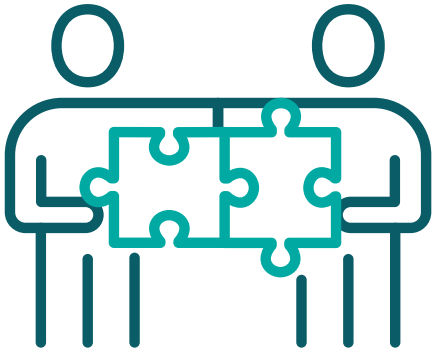
Recognition Awarded to Project Teams

14.2 Final Knowledge Sharing Summit Recognition

Government Entities	Project Title
7 Stars ★★★★★★★	TRADE Benchmarking Proficiency Certificate with Commendation
Dubai Corporation for Ambulance Services	Moonshot: Is Where the Magic Happens
Dubai Electricity and Water Authority	DEWA EV Green Charger 2.0
Dubai Municipality	Digital Transformation of Contracts (DTC)
Dubai Police	Safe Bags (Airport Secure Luggage)
Dubai SME	Improving Entrepreneurs' Start-Up Guidance and Support Services
5 to 6 Stars ★★★★★★	TRADE Benchmarking Proficiency Certificate with Commendation
Community Development Authority	Enabling Happiness
Dubai Health Authority	Dubai Heart Safe City
General Directorate of Residency and Foreigners Affairs	Cooperative Integrated System
Roads and Transport Authority	Return on Innovation for Agile Innovation Journey
3 to 4 Stars ★★★★	TRADE Benchmarking Proficiency Certificate with Commendation
Dubai Land Department	Smart Property Valuation

Figure 14.19: The recognition awarded to the Dubai We Learn teams.

Chapter 15



Key Achievements

Key Achievements

The Emirate of Dubai has made a dramatic transformation in the past 50 years to become one of the world's most iconic destinations. Dubai has become an attractive magnet for tourists, settlers, and businesses from many countries. As its temporary and permanent resident populations continue to rise, there will be an increasing demand for public services. High profile events such as Expo 2021 will serve further to highlight the need for public services to continue their journey of excellence. Driven by the visionary leadership of His Highness Sheikh Mohammed bin Rashid Al Maktoum and the passion and commitment of its public workers, government entities in Dubai are well poised to meet these challenges.

The Dubai Government Excellence Program (DGEP) is at the forefront of facilitating capability development initiatives and activities across government entities. 'Dubai We Learn' is one such initiative. Launched and managed in partnership with the Centre for Organisational Excellence Research (COER), New Zealand, the initiative has guided 34 important government projects to completion.

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

The 10 projects selected for the 3rd Cycle of Dubai We Learn's Excellence Makers Program encompassed a range of projects that ranged from innovation within an ambulance service to improving start-up guidance and support services for entrepreneurs. The successful deployment of quick wins and best practices across all projects within the "ten month" timeline of the initiative is a testament to the commitment, passion, and energy of the project teams and their sponsors. In addition, it highlights the versatility of the TRADE Benchmarking Methodology and its applicability to a variety of projects in a variety of organisations. Figure 15.1 provides a summary of the key achievements of the 10 projects and Figure 15.2 classifies these achievements into financial, customer/citizen, human resource, and process benefits.

Key Achievements

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

Government Entities	Project Title	Key achievements of projects within a one-year time frame
Community Development Authority (CDA)	Enabling Happiness	Implementing, within one year, 32 quick wins to transform CDA employees from highly disengaged to a happier workforce. In addition, a 2020 Happiness Plan has been developed based on best practices. From 0% happiness initiatives in 2018 to 85% staff engagement in the various programs in 2019 was a remarkable shift. Impressive early results reported, for example, a decrease in employee absenteeism from 4.6% in Apr 2019 to 3.8% in Oct 2019, and a reduction in 1-day sick leave per month from 0.99 in Feb 2019 to 0.56 in Oct 2019. An increase in employee loyalty, empowerment, communication, satisfaction, productivity, and happiness levels are expected once the plan is fully implemented.
Dubai Corporation for Ambulance Services (DCAS)	Moonshot: Is Where the Magic Happens	The development and sign off of a Blueprint for a Moonshot Innovation Ecosystem by DCAS' senior executives with key components implemented (innovation strategy/charter, organisational structure, ideas management process, innovation shaping tool and leadership engagement) with full maturity expected by Dec 2021. The Blueprint consists of 12 components (Leadership, Strategic Planning, People, Culture, Processes, Tools and Techniques, Training, Facilities, Ideas Capture, Ideas Management, Future Foresight, and Metrics) with 66 KPIs monitoring progress and outcomes. DCAS improved its innovation maturity score from 46% to 64% and received Gold Accreditation for innovation management by Ideas UK. DCAS laid the foundations to achieve operational excellence and become a pioneer in world-class emergency services.
Dubai Electricity and Water Authority (DEWA)	DEWA EV Green Charger 2.0	DEWA is taking the lead in developing a unified cable system, creating a niche in the international market in EV adoption, branding DEWA as a pioneer within the UAE and GCC in designing of a customised EV fast charger with smart solutions. A mock-up trial of the license plate recognition system for the EV Green Charger 2.0 at WETEX 2019 garnered an overall customer satisfaction rate of 99%. This project is expected to deliver financial benefits of AED 428,000 per year from increased revenues and savings in maintenance costs.
Dubai Health Authority (DHA)	Dubai Heart Safe City	Development and initial deployment of a Short-term Roadmap (2019 – 2020) and Long-term Roadmap (2021-2025) with an expectation that when fully deployed approximately 800 per lives per annum will be saved through achieving a 65% or greater survival rate from OHCA. With limited OHCA data published in the Gulf region and Dubai, the commissioning of the Dubai Heart Safe City project has led to OHCA baseline data being collected and the development of an OHCA Registry. From Aug 2019 till Dec 2019, 2041 people were trained in CPR and AED usage in an ongoing public campaign for an efficient 'chain of survival'.

Key Achievements

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

Government Entities	Project Title	Key achievements of projects within a one-year time frame
Dubai Land Department (DLD)	Smart Property Valuation	The smart property valuation system is the first in the international real estate market. The development of a predictive model based on Artificial Intelligence and Machine Learning will generate a valuation certificate in 15 secs instead of 3 days. The new model has been designed incorporating the approved real estate valuation standards and global regulations and was launched in September 2020. It is expected that the project will result in a 40% (3 million AED) reduction in the annual cost of the valuation service.
Dubai Municipality	Digital Transformation of Contracts (DTC)	A complete reengineering and 100% digitization of the service contract cycle, resulting in a reduced contract completion time from an average of 210 days (2018) to 24 days (December 2019), enabling 380 contracts to be completed in 2019 from 97 in 2018. To achieve this, four major practices and 37 quick wins were implemented leading to financial savings in excess of AED 80 million in one year and increased satisfaction of suppliers (65% to 84%) and Dubai Municipality's business units (61% to 94%).
Dubai Police HQ	Airport Secure Luggage (Safe Bags)	The project saved the airline companies approximately AED 67 million (and projected to be in excess of AED 100 million per year in future) based on the reduction in the number of passengers being summoned for security inspections due to improvements in identifying safe checked-in bags and improved procedures enabling some bags to be opened if videoed. The project resulted in less delayed flights (saving on airline penalty fees and compensation costs for summoned passengers who miss their flights). Additional savings of approximately AED 2.8 million due to a 4.5% productivity improvement which meant the need to employ less screeners to do the same amount of work (saving on salaries, recruitment and training costs).

Key Achievements

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

Government Entities	Project Title	Key achievements of projects within a one-year time frame
Dubai Small and Medium Enterprises (Dubai SME)	Improving Entrepreneurs' Start-up Guidance and Support Services	26 best practices approved for implementation with two quick wins implemented paving the way for a world-class business start-up service for Emirati businesses. The guidance service process cycle time to complete an application reduced from 4.25 days to 1 day saving employee and customer time equivalent to AED 10,300,000 up to June 2020. Employee satisfaction with the new process increased from 30% to 88%. An Entrepreneurs Pre-assessment Tool is close to completion with other best practices to follow.
General Directorate of Residency and Foreigners Affairs (GDRFA)	Cooperative Integrated System (CIS)	Integration of the departments of Strategy, Innovation, PMO, Operations, and Excellence under the Sector of Quality and Excellence and the development of a CIS Master Plan for full implementation in 2020 with performance measures in place. Several quick wins achieved such as cancelling duplicated projects leading to savings of AED 1,547,828, reducing the number of open (less value adding) projects from 75 to 34, 100% documentation of business and administrative processes, increasing the level of innovation activity (for example, 18 innovation project prototypes in 2019 compared to none in 2018) and receiving recognition by GInI® as a Certified Innovative Organization (CInOrg)® in 2019.
Roads and Transport Authority (RTA)	Return on Innovation (ROI) for Agile Innovation Journey	The development of an innovation management system that integrates future shaping, strategy and innovation and measures ROI and supports innovation agility. The first to develop within Dubai government a systematic tool to measure non-financial ROI - applicable to any private or governmental organization. Strong project engagement with innovation consultants, subject matter experts, professors from various universities, leading researchers, young entrepreneurs, other UAE government entities, and community members.

Figure 15.1: Summary of project achievements.

Key Achievements

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

Financial Benefits:

- Entire project executed with zero direct costs with actual savings through in-house resources, leading to cost savings of approx. AED 2,300,000. Savings and benefits for patients/stakeholders estimated to be hundreds of millions of AED in the future. **(DCAS)**
- AED 600,000 saved from in-house technical design and third-party local manufacturing of the mock-up. Estimated annual savings of AED 428,000 from increased revenues and reduced operational costs. **(DEWA)**
- Project expected to save approx. AED 40 million for health service by 2025 through reducing the number of patients requiring short-term and long-term care. Annual cost savings of approx. AED 10 million if a survival rate of 65% is achieved compared to current rate of approx. 5%. Indirect savings expected from patients with better OHCA clinical outcomes and recovery rates, less work absenteeism, and optimum performance at work. **(DHA)**
- Expected saving of more than AED 3 million annually by reducing the valuation service cost by 40% from AED 2,334 to AED 1,400 per unit valuation request. **(DLD)**
- Overall, the project saved Dubai Municipality in excess of AED 80 million in a year (consisting of productivity contribution savings in excess of AED 67 million per year and budget spend savings in excess of AED 13 million per year). **(Dubai Municipality)**
- Saved the airlines companies approx. AED 67 million (projected to be in excess of AED 100 million per year in future years) due to reduced passenger summoning. Employee Productivity Savings: Eliminated cost of hiring additional screener analysts= AED 2.8 million. **(Dubai Police)**
- Expected increase in productivity to be measured in 2020. **(CDA)**
- Estimated savings from employee-time-saved up to June 2020 was AED 5,100,000. Adding the time saved by clients results in a total of AED 10,300,000 savings. **(Dubai SME)**
- Cancellation of duplicated projects led to savings of AED 1,547,828 in 2019. Substantial productivity gains expected due to greater institutional integration and alignment to strategy supported by an enhanced innovative culture. **(GDRFA)**
- Financial benefits are expected to be significant with stakeholders expected to submit higher quality ideas supported by a more agile, responsive and effective innovation management system. **(RTA)**

Key Achievements

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

Customer/Citizen Benefits:

- Expected future benefits include 10-fold improvements in operational excellence and emergency services through DCAS virtual training and immersive simulation, robotic emergency technician's lab and creation of a virtual Silicon Valley for Emergency Services. **(DCAS)**
- Positive public feedback at the WETEX 2019 mock-up trial with an overall customer satisfaction rate of 99%. Reduced number of steps in the EV charging cycle from 4 to 2 steps with a user-friendly interface. Time required to begin the charge cycle reduced from 120 secs to 30 secs. Enhancements to the EV charger will support campaigns to increase the number of electric vehicles in Dubai. **(DEWA)**
- From Aug 2019 to Dec 2019 the general public were trained in cardiac arrest recognition, CPR and AED usage: at Rashid Hospital 919 people (target – 700, success rate 131%), 413 family members trained of 445 patients discharged from the Cardiology Unit (target 80%, success rate 93%), other health care facilities 709 people (target – 600, success rate 118%). **(DHA)**
- Expected reduction in valuation processing time from 3 days to 15 seconds. Expected increase in customer satisfaction from 91% (2018) to 94% (2020). **(DLD)**
- Overall supplier (customer) satisfaction increased from 65% to 84%. **(Dubai Municipality)**
- Decrease in the number of passengers summoned at Level 6 of inspection by 98%. 182% increase in the number of bags opened without summoning at Level 6 of inspection. Enhanced public awareness on social media platforms garnered 266,595 views of the "Safe Bags" creative content. **(Dubai Police)**
- Increase in the level of entrepreneurs' happiness for service information from 82.3% to 86.5% and service delivery time from 83.6% to 87.7%. Reduction in the number of unnecessary visits by entrepreneurs to the service centre from 30% to 0% (April 2020 onwards). **(Dubai SME)**
- Smart Tunnel Innovation Project at Dubai Airports resulted in a reduction in the waiting time for airport passengers from 5 mins to 10 secs. **(GDRFA)**
- Decrease in response time to assess incremental ideas from 54 days to 15 days. **(RTA)**

Key Achievements

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

Process Benefits:

- Development of blueprint for innovation; improvement in Innovation Maturity Assessment Score from 46% to 64%. Received Gold Accreditation for innovation management by Ideas UK. **(DCAS)**
- Developed design specifications for a prototype in 2020 and a plan for full manufacture in 2021. Expected reduction in charger downtime from 9% (Dec 2021) to 2% (Dec 2024) for the fast charger 2.0. **(DEWA)**
- Development and initial deployment of Short-term Roadmap (2019 – 2020) and Long-term Roadmap (2021-2025). **(DHA)**
- Development of a smart property valuation system ready for launch in September 2020. Effective AI-supported data cleansing approach and User Acceptance Test with improved data accuracy to 95% and AI prediction accuracy of 85%. **(DLD)**
- Transformed a manual process to a 100% digital contract process; cycle time for contract completion reduced from an average of 210 days (2018) to 24 days (Dec 2019). Service delivery of the contract reduced from 45 days (Mar 2019) to 1 day (Dec 2019); process steps reduced from 97 mins to 33 mins. Reduction in contract stages from 18 to 8. **(Dubai Municipality)**
- Increase in Airports Council International (ACI) Scoring in Security since the beginning of the "Safe Bags" project. Between Apr to Dec 2019, clearance rate of safe bags checked-in at Level 2 increased by 4.5% and by 13.9% at Level 4. Decrease in the number of bags at Level 5 of inspection by 74%. Reconstructing and enhancing Dubai Airport Terminal 2 screening hall improved the work environment. **(Dubai Police)**
- Improvement in the guidance service process, from 4.25 days (29.75 hours) in 2018 to 1 day (7 hours) in 2019 to complete a start-up application. **(Dubai SME)**
- Integration and alignment of five departments. Increase in the quality of Project Charter documentation for projects from 50% to 100%. 19 innovative/foresight/partner projects linked to strategic objectives in 2019. 100% documentation of business and administrative processes and 95% support processes in 2019 (ARIS) from 0% (2018). Received recognition as Certified Innovative Organization® by GInI®. **(GDRFA)**
- Development of an innovation management system that integrates future shaping, strategy and innovation and measures ROI and supports innovation agility. Certification of the innovation management system to ISO 56002 in Dec 2019. Increase in innovation maturity from 77.8% in 2018 to 82.9% in 2019. **(RTA)**

Key Achievements

15.1 Key achievements of the 3rd Cycle of Dubai We Learn projects

Human Resource Benefits:

- Decrease in employee absenteeism from 4.6% in Apr 2019 to 3.8% in Oct 2019; decrease in the number of 1-day sick leaves per month from 0.99 in Feb 2019 to 0.56 in Oct 2019. 85% of employees participated in 30 happiness initiatives in 2019 compared to 0% in 2018. **(CDA)**
- 326 employees attended 6 innovation labs; increase in number of employees trained in innovation from 37 (2018) to 243 (2019), and increase in number of employees using Suggestion Scheme from 189 (2018) to 638 (2019). **(DCAS)**
- Wide stakeholder engagement with a project steering committee formed representing 11 government entities. **(DHA)**
- 74.4% increase in productivity with 380 contracts completed in 2019 from 97 in 2018; overall business units' satisfaction increased from 61% to 94%. **(Dubai Municipality)**
- Terminal performance improved due to a standard minimum number of HBS screening analysts assigned per shift in baggage control rooms, resulting in reduction in timeout and improved screener decision making. The most efficient Screening Analysts awarded with the new incentive system. Increase in Screener Analyst's productivity from 94.8% (Apr 2019) to 99.3% (Dec 2019). Specialised training in inspection conducted for screening analysts further increased their efficiency. **(Dubai Police)**
- Overall employee satisfaction significantly increased from 30% (old process) to 88% (new process). The business advisor reporting timing improved from 2 days to 1 minute. **(Dubai SME)**
- 15 GDRFA employees recognised as GIA Certified Strategic Planning Professionals (GIA-CSPP®). **(GDRFA)**

The achievements from the Excellence Makers Program to-date have been outstanding. These achievements are ongoing with some of the projects still in the implementation phase and others expecting performance results to improve further. The program is leading to major benefits for Dubai citizens and residents, visitors, and government employees. The projects have saved or generated millions of AED through waste reduction, innovations, and productivity gains. For the future, more benefits will follow as government entities start new benchmarking projects using the TRADE Best Practice Benchmarking Methodology.

Chapter 16

Lessons Learnt and Key Success Factors

Lessons Learnt and Key Success Factors

This chapter presents the lessons learnt and key success factors for undertaking a benchmarking project. It is based on the perceptions of the ten teams whose projects have been presented in this book. This is followed by a conclusion explaining how the success of Dubai We Learn can be built on to foster and embed an organisational learning culture throughout the Government of Dubai.

16.1 Lessons Learnt

The lessons learnt were submitted by all benchmarking teams with their respective final benchmarking report. The lessons learnt have been grouped into common themes and are shown as they were submitted.

Comments on the TRADE Benchmarking Methodology:

- TRADE methodology is a very logical structured approach to enable project teams to conduct benchmarking using evidence-based tools. The completion of each of the five stages of TRADE is critical to the success of project outcomes. **(DCAS)**
- TRADE methodology is a useful tool for capturing issues and impacts. The methodology enables the project team to better define benchmarking requirements and outcomes. **(DEWA)**
- Benchmarking team members need to be very structured and the TRADE sheet helps a lot in this area through framing tasks and actions. The TRADE sheet and accompanying documents need to be updated regularly to reflect progress, achievements, and to make sure all members are still aligned to the aim and scope. **(DHA)**
- The TRADE Benchmarking Methodology, resources and templates guided the team to complete the benchmarking project. For example, each stage had a plan on how to complete the stage with essential information such as the assignment of the task, planned start date, the actual one, and the outcomes from each stage. Also, provided were templates on how to communicate with benchmarking partners and seek their help with thank you letters too; shows how professional the methodology is! **(Dubai Municipality)**
- The benchmarking methodology adopted by Dubai Police and in line with best practices (TRADE) has been very effective in allowing us to ask ourselves the right questions at different stages of the methodology. **(Dubai Police)**

Lessons Learnt and Key Success Factors

16.1 Lessons Learnt

Comments on the TRADE Benchmarking Methodology:

- The TRADE and benchmarking tool have enabled a mindset and culture of continuous improvement and change management besides learning. We have achieved the required improvements without investments in purchasing additional tools or equipment, building new infrastructure or hiring more technicians. We utilized existing resources. **(Dubai Police)**
- We found that TRADE methodology and structure are so useful, therefore; we initiated the same to improve another service in Dubai SME (Government Procurement Program). **(Dubai SME)**
- TRADE methodology enabled the team to perform the project despite its complications. **(GDRFA)**
- TRADE has served as a great tool even when we were new to TRADE. It allowed us to be more efficient and flexible in executing the project and communication as it avoided the use of unnecessary tools. TRADE has captured all the needed information in one document. **(RTA)**
- RTA has adopted the TRADE methodology as the reference tool to conduct and implement its benchmarking process for all projects, initiatives, and performance indicators. **(RTA)**

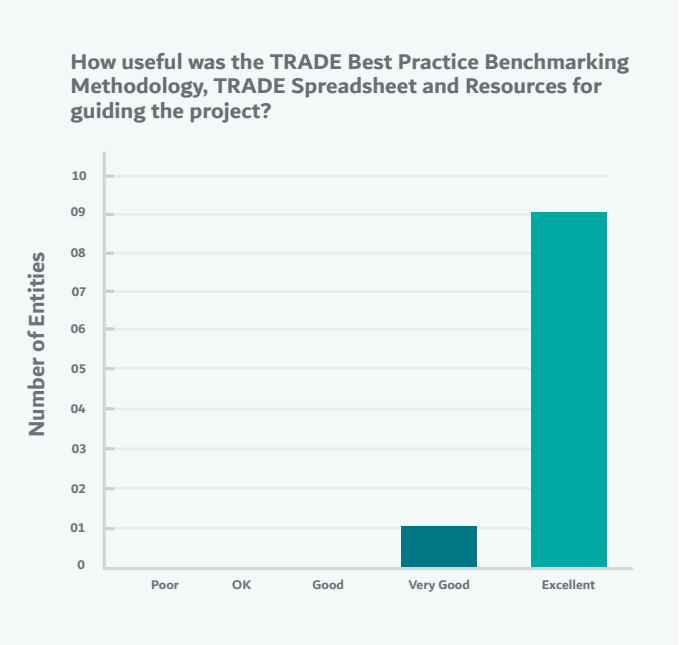


Figure 16.1: Survey feedback from the 10 teams on the value of the TRADE methodology.

Lessons Learnt and Key Success Factors

16.1 Lessons Learnt

Comments on the importance of Leadership:

- We had strong leadership involvement and support throughout the project. This included our CEOs' attending the benchmarking visits and our Director General leading a brainstorming session. Due to their involvement it meant our employees could see how seriously the leadership wanted to create the right culture for employees to enhance employee happiness. **(CDA)**
- It is important to communicate early in the project and involve leadership and fellow employees throughout all different phases of the project. It makes quick wins happen quicker. **(DCAS)**
- We had a high level of commitment from top management and the project sponsor. **(DEWA)**
- The sponsor and team leader's support are essential; it gives momentum across the organization and clears obstacles. **(DHA)**
- Team leadership and members' spirits helped to overcome difficulties. **(DLD)**
- One of the factors that went well during this project is the full commitment and support of our CEO (Team Sponsor) and support from the Head of Procurement. **(Dubai Municipality)**
- The sponsor and deputy sponsor's support were critical to the success of the project. **(Dubai Police)**
- Project Sponsor's interest in the project and his continuous support encouraged the team members (supported us in implementing immediate improvements and in allocating budget). (Dubai SME)
- Sponsor support played a crucial role in improving the work's progress. It is important to involve senior management managers in the project. **(GDRFA)**
- The sponsor and deputy sponsor's buy-in was critical to the success of the project. **(RTA)**
- Team leadership and spirit. Working together for a common goal in a structured way and the mutual support in accomplishing tasks and requirements was unique and fruitful. **(RTA)**

Lessons Learnt and Key Success Factors

16.1 Lessons Learnt

Comments on the importance of Teamwork:

- Engaging all the stakeholders from the start of the project made the teamwork smooth and we got the support we needed through the different stages of the project. **(CDA)**
- Employee happiness is not only HR's role but the whole organization, therefore we involved all our staff in the benchmarking project as one big team. The project can provide management with best practices and appropriate programs, but the implementation is everyone's role. **(CDA)**
- The team members and their different backgrounds helped in achieving the objectives in a structured way. **(DLD)**
- Some of our team members were first to join this type of project and it added to their skills and knowledge, they gained a lot in terms of working as a team and allocating and completing assigned tasks. Others added more to their knowledge and experience as it was the second time they participated in the DWL cycle. It gives the team the spirit to learn; first search, analyse and then apply proper solutions through a benchmarking methodology. **(Dubai Municipality)**
- The structured way of working together; excellent teamwork and support from existing members were critical success factors for the benchmarking project; sharing of ideas proved to be the best way for a successful project. **(Dubai Police)**
- It is important to utilize the online means of communication to complete tasks such as Google Drive, OneDrive, emails and Skype. **(Dubai Police)**
- Identify team dynamics and team members' capabilities at an early stage. Team members of any project should be carefully shortlisted taking into consideration their potential, capabilities, and availability. **(Dubai SME)**
- You should always include junior staff in the projects to enhance their capabilities and assist them to gain knowledge and experience. Junior employees' research skills, presentation skills, etc., were strengthened throughout the TRADE project. **(Dubai SME)**

Lessons Learnt and Key Success Factors

16.1 Lessons Learnt

Comments on the importance of Change Management:

- The team needs to document and review its progress from project initiation to closure to ensure proper organization/categorization of evidences. This process ensures that there are no surprises with the project. Everyone needs to be aware of the project's direction and the reasons for selecting or implementing specific best practices. **(DCAS)**
- TRADE provides a framework of activities to be undertaken to create a business case for change. Implementing quick wins creates more trust in the project and stimulates more participation to succeed. **(DCAS)**
- Build relationships and enhance networking opportunities. **(DCAS)**
- Consistent and targeted communication with all stakeholders is key to project success and sustainability. **(DHA)**
- It is important to have short and long-term objectives for any initiative. **(DLD)**
- Team members need to focus more on assigned tasks of the project and be discharged from the day-to-day operations to complete tasks accordingly. **(Dubai Municipality)**
- Allocate proper time for the TOR and Review stages. Involve all relevant stakeholders and encourage everyone to participate and provide inputs. **(Dubai SME)**
- The Risk Management Form helped the team to overcome high risks, such as the difficulties of data collection and change management involving stakeholders. **(GDRFA)**
- Stakeholder engagement during our meetings, site visits, discussions, brainstorming, and workshops added great value to the project. **(GDRFA)**
- Conducting brainstorming sessions with internal and external stakeholders helps in generating new creative and innovative ideas. With stakeholders involved they become interested, engaged and understand the project's findings **(RTA)**

Lessons Learnt and Key Success Factors

16.2 Key Success Factors for Benchmarking Projects

The key success factors for undertaking benchmarking projects were submitted by all the benchmarking teams with their respective final benchmarking report. The key success factors have been grouped into the five stages of TRADE.

Key success factors for Terms of Reference – Plan the project:

- Having a well-defined project scope and objectives is essential for the success of a benchmarking project. **(CDA)**
- The project's tasks can be properly delegated after conducting a well-prepared Terms of Reference. **(DEWA)**
- Working with the Dubai We Learn team and going through the TRADE stages greatly helped the benchmarking team to re-frame the project scope and ambitions. **(DHA)**
- The scope of the project can be changed throughout the duration of the project based on the findings obtained at each stage of TRADE. **(DLD)**
- It is important to have short and long-term objectives for the project. The short-term objectives enable quick wins to be implemented **(DLD)**
- The factor that went well in this project is that we built and established our own detailed stakeholder analysis which helped to communicate effectively the requirements from all stakeholders and get their buy-in during any changes in the processes and systems. **(Dubai Municipality)**
- A clear definition of aim and scope facilitates TRADE methodology implementation. **(Dubai Police)**
- It is important to spend time on developing and clarifying the project aim and then make sure the whole project is aligned to achieving it. **(GDRFA)**
- Setting definitions within the TOR for terms such as "institutional integration" ensured all team members had the same understanding of what we wanted to achieve and helped us to build a (CIS) framework not only for GDRFA but for Dubai too. **(GDRFA)**

Lessons Learnt and Key Success Factors

16.2 Key Success Factors for Benchmarking Projects

Key success factors for Review current state:

- The Review stage helped us to focus on specific areas in employees' happiness and therefore made our decision clear regarding which benchmarking partners to select and the best practices to deploy. **(CDA)**
- Using tools such as Fishbone, and SWOT as part of TRADE helped to frame the issues and communicate them. The report we produced from the Review phase made leadership commit to supporting our project. **(DCAS)**
- Meetings with multiple stakeholders to understand the issues and gain their support was critical for the project's success. **(DEWA)**
- The Review stage was very helpful; it provided the project team with a wealth of knowledge and comparable experiences that brought to light certain practices that were not thought of. **(DHA)**
- The Review stage was very beneficial to the team as it helped with establishing the fundamental basis of DLD's current status regarding property valuation. **(DLD)**
- One of the factors that helped the project to achieve its objectives was using various tools for analysing different phases of the project. For example, in the Review stage, we used 17 tools and analyses. The Review stage enabled us to identify many improvements before progressing to the Acquire stage. For example, value stream analysis enabled us to eliminate various non-added value processes and reduce the contract stages from 18 to 8 stages. **(Dubai Municipality)**
- During our Review stage, we found that there were some technological quick wins that we could deploy straight away to save time and effort. **(Dubai Municipality)**
- The Review part of the TRADE spreadsheet with its identified activities was very helpful in understanding the steps to complete in an orderly and systematic manner. **(Dubai Police)**
- Stakeholders' feedback in the Review stage has a huge impact on any improvement process, whether they are internal or external. **(Dubai SME)**
- We have benefited from using different analysis methods and tools such as conventional (e.g. SWOT and Fishbone) and more advanced (e.g. Kaizen Approach). This will help the team in future projects. **(Dubai SME)**

Lessons Learnt and Key Success Factors

16.2 Key Success Factors for Benchmarking Projects

Key success factors for Acquire best practices:

- Visits conducted revealed leading practices in some aspects of innovation ecosystem components that were documented and planned for implementation in DCAS as quick wins. Components were selected based on financial and practical considerations. **(DCAS)**
- Benchmarking is not always about conducting visits but organizations can learn through other means including desktop research. **(DCAS)**
- Both desktop research, as well as site visits and stakeholder meetings, are important; the best practices, innovative ideas, and past experiences can save a lot of time and effort. **(DHA)**
- The Acquire stage helped the team learn different approaches to implementation. There were several approaches to increase the survival rate from cardiac arrests to study and prioritize according to the Dubai context. **(DHA)**
- Benchmarking partners can be from different industries covering different parts of the process to be benchmarked. **(DLD)**
- Each best practice visit was very beneficial. The team members managed to learn on a professional and personal level and that will add value to the initiative and their work experience. **(DLD)**
- We have learnt that selecting the right benchmarking partners is considered the main success of the Acquire stage. If the wrong benchmarking partners are selected, it will result in failing to capture the right practices. **(Dubai Municipality)**
- Benchmarking partners are not always required to be working in the same sector, on the contrary, great best practices can be acquired from any leading organization that works in any sector. **(Dubai Police)**
- We don't always need to travel for site visits when other communication channels are available. We alerted our CEO office to update us on any potential visits from international partners (usually many delegations visit Dubai during exhibitions and conferences). Therefore, instead of traveling, we managed to schedule in-house visits by bringing our benchmarking partners to our offices. **(Dubai SME)**
- Always be open to new collaboration opportunities. **(Dubai SME)**
- Having set a proper scope and criteria for benchmarking helped in selecting and creating an initial list of core and creative benchmarking partners. **(RTA)**
- We were the 1st benchmarking team during Dubai We Learn to invite the other benchmarking teams to our organisation to obtain their ideas and best practices to improve our innovation process. **(RTA)**

Lessons Learnt and Key Success Factors

16.2 Key Success Factors for Benchmarking Projects

Key success factors for Deploy – Communicate and implement best practices:

- The team were highly motivated to implement best practices in a short period of time and were supported by having the funds available. **(CDA)**
- Carrying out a focus group and a pilot demonstration at the WETEX exhibition was very fruitful, for validation and refining the design. **(DEWA)**
- We have learnt that evaluating ideas properly based on certain analysis will impact positively on deploying it accurately based on the project aim and scope. Well-planned action plans are required for successful implementation. **(Dubai Municipality)**
- One factor that impacted positively on our project objectives was implementing 37 quick wins. **(Dubai Municipality)**
- The benchmarking team developed an initial action plan for the best practices selected. Once an action plan was developed, we identified the resources required to complete each task. **(Dubai Police)**
- We have involved customers, employees, and partners in developing the smart system. The team is involving all team members to test each module to give feedback and ensure a seamless process. In addition, clients were also involved in designing the steps to ensure the best customer experience. **(Dubai SME)**
- Involving stakeholders during the planning phase of the project and sharing information is of critical value to get their support during implementation. **(RTA)**

Key success factors for Evaluate the benchmarking process and outcomes:

- The selection of the right KPIs will help measure effectively the success of the project. **(Dubai Police)**
- Correct selection of data and measuring performance continually reflected positively on decisions and quality of work. **(Dubai Municipality)**
- If the Key Performance Indicators were explored sooner, the progress of the project would have been better. It is important in the future to focus from the beginning to find added value measures. **(GDRFA)**

Lessons Learnt and Key Success Factors

16.3 Conclusion – Building on the success of Dubai We Learn

Whilst the Final Knowledge Sharing Summit in December 2019 marked the end of the 3rd Cycle of Dubai We Learn, this did not mean all the projects were completed and the benefits had ended. Best practices from the projects continued to be deployed in 2020 and their success measured. In addition, participants will continue to utilise the skills, tools, and techniques that they have learnt and apply them to their daily work and to new benchmarking projects. From the perspective of DGEP and COER, there is an opportunity to extend some of the learning to other government entities in Dubai.

It is hoped that government employees will:

- Read this "Dubai We Learn" book to learn about the TRADE Best Practice Benchmarking Methodology and the successful projects undertaken.
- Contact and visit the government entities that participated in the Excellence Makers Program to learn about their projects and best practices to see if they can be transferred to their own organisation.
- Consider being trained in benchmarking (Bronze Certification Level).
- Set up benchmarking projects and have these teams certified at benchmarking proficiency (Silver) level on completion of their projects. Within each government entity, there should be at least one person certified at a benchmarking mastery (Gold) level to oversee and facilitate projects.
- Consider how to support and embed a culture of organisational learning with multiple benchmarking and best practice sharing projects and activities within their government entity. Such a culture will provide a stimulus for creativity and innovation and support the second pillar of "Innovation" of Dubai's 4th Generation of Government Excellence Systems Model.

Lessons Learnt and Key Success Factors

16.3 Conclusion – Building on the success of Dubai We Learn

There are several key learning points relating to the overall Dubai We Learn initiative. These are:

- The importance of selecting the right projects to participate in the Excellence Makers Program. Projects should address major challenges or opportunities that are directly related to the strategy of individual government entities and/or the strategy of Dubai as a whole and have the strong support of a project sponsor.
- Ensuring that each team measures performance at the start of the project (however difficult it is to do) and measure it at monthly intervals throughout the project so that the impact of any improvements (quick wins) can be monitored and the final impact of the project is known for both non-financial and financial impact. Without measurement, the justification for undertaking a project becomes questionable.
- Encouraging teams to use "out of the box" thinking, radical transformation, and foresight and future-shaping. Therefore, for the teams to remain open to new ideas and new ways of thinking through engaging stakeholders in the project and learning from benchmarking partners from other industries.
- The importance of deploying quick wins as soon as possible when improvements and solutions are identified as this builds the project sponsor's and team's confidence. Most projects identify between 50 to 100 improvement ideas and practices that need to be evaluated for relevance, ease of implementation and potential impact. Together when implemented these produce transformational leaps in performance.
- The importance of providing a professional support structure for the teams including training, knowledge sharing summits, team leader and benchmarking facilitator meetings, feedback on the TRADE spreadsheets and best practice research support and strong support from the leaders in government (the Executive Council). This support engendered a learning and sharing culture so that at the end of the year all the teams were working as one big team for Dubai rather than as 10 separate teams.
- The Excellence Makers Program was ten months from start to finish to allow for preparations for Dubai Expo. This time was too short for some teams to deploy major changes and demonstrate their project's success. To address this, even though the program support ended in December 2019, project teams were encouraged to resubmit their benchmarking report in July 2020 to have their projects re-assessed and achieve a higher certification level for their project. For future programs it is advised that they are at least for a year to allow more time for deployment and evaluation.

Lessons Learnt and Key Success Factors

16.3 Conclusion – Building on the success of Dubai We Learn

At the end of the Dubai We Learn 3rd Cycle the project teams were surveyed to obtain their opinion on how it had assisted their projects. A total of 16 responses were received with representation from each team. 69% voted Dubai We Learn as a 7-Star initiative and 31% a 6-Star initiative, refer to Figure 14.1.

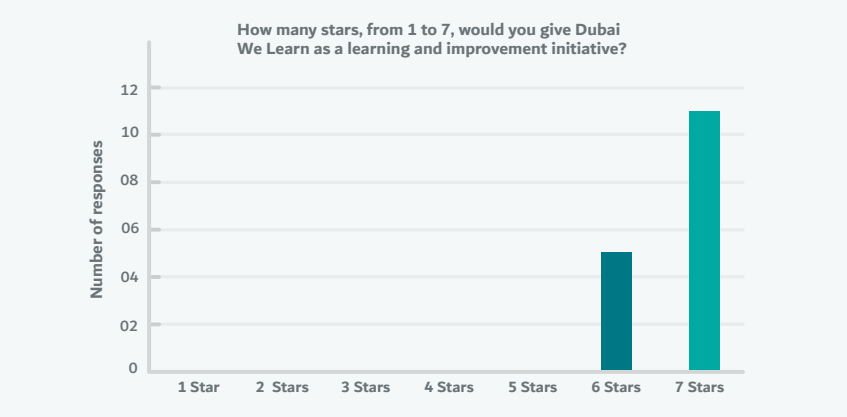


Figure 16.2: Survey feedback from the 10 teams on Dubai We Learn.

Following on from the 3rd Cycle of Dubai We Learn a 4th Cycle of Dubai We Learn was quickly arranged in April 2020 to support the Dubai government's response to the COVID-19 Pandemic. The remit was to provide the Executive Council's Crisis and Disaster Management Committee with global best practices in Crisis Management, Healthcare Management, Food Security and Supply Chains, Economy, and Societal Behaviour within one month.

Due to the urgency and importance of the project, team members were selected who had previously been involved in 7-Star or 5-6 Star TRADE benchmarking projects. The project brought together 28 government employees from 11 government entities, to work remotely and contribute fresh ideas and practices on how to address the pandemic. To make sure the Executive Council's Crisis and Disaster Management Committee could act swiftly and decisively as soon as valuable ideas and best practices were found they were shared with the committee, whilst a formal report and a presentation were given at the conclusion of the project. This project once again demonstrated the importance and value of benchmarking in supporting decision making at the highest level within government and ensured the Dubai Government's approach to managing and recovering from the pandemic was centred on best practices.

For the future, further Dubai We Learn Cycles will continue to support Dubai's unrelenting pursuit of excellence. **As emphasised by Sheikh Mohammed bin Rashid Al Maktoum "I want Dubai to be number one. Not in the region, but in the world. Number one in everything: high education, health, and housing. I want to give my people the highest way of living" - benchmarking and implementing best practices will be a key component in achieving this.**

Testimonials

Testimonials

During the Final Knowledge Sharing Summit, brief interviews were held with the organisers of Dubai We Learn, Judges and participants for their opinion on the Excellence Makers Program. In addition, feedback statements were collected from the project sponsors. These opinions and statements, collated in this section, demonstrate the success of the program and the enthusiasm, commitment and exceptional performance of all the project teams.

ADB ASIAN DEVELOPMENT BANK

Mr. Arndt Husar

Senior Public Management Specialist (Digital Transformation), Philippines

Judge – Final Knowledge Sharing Summit, Dubai We Learn, 2019

Benchmarking helps in gauging what good ideas we can take from one area to the other. So, context is important. Take what is adaptable. DWL always impresses with a high quality of benchmarking activity, seeking out what offers interesting comparisons and learning. It's very organized and very professional. It seems to deliver real and very ambitious results. The teams who end up with 7 stars demonstrate that they are going beyond just benchmarking, they implement and evaluate at a role model level. I am always very happy to participate as there is also a lot of learning for the judges in what happens at DWL. I hope that Dubai continues to do this benchmarking activity, having built a lot of internal capacity. DGEP could potentially look at how to leverage people that have experienced DWL to act as an internal resource as they already have experience.

UNIVERSITY of GREENWICH

Professor Dotun Adebanjo

United Kingdom

Judge – Final Knowledge Sharing Summit, Dubai We Learn, 2019

Over the years, I have seen great improvements in the quality of benchmarking proficiencies and skills of the participating teams. The projects have had a very significant impact on Dubai's society and economy, and the health of the people. One of the outstanding projects last year was the Dubai Health Authority project which is helping to tackle diabetes within Dubai. I think if you replicate these sorts of projects across many entities over the years, it will have a major impact on society, and I have been very happy to be involved with Dubai We Learn.

Testimonials

Singapore Productivity Centre

Dr. Woon Kin Chung

Previous Head of Singapore Productivity Centre, Singapore

Judge – Final Knowledge Sharing Summit, Dubai We Learn, 2019

Benchmarking is engrained in public sector organisations in Singapore. From an internal perspective, before measuring for benchmarking productivity in a specific area, first measure where the entire organisation stands. This is my first time here as a Judge. Dubai We Learn has really set a benchmark on how benchmarking initiatives for multiple organisations should be coordinated and facilitated. To see public sector organisations being so committed to all these innovative benchmarking projects is very laudable. With organisational learning, it will improve the performance of the public sector service significantly and will have a serious impact on society!

هيئة تنمية المجتمع
Community Development Authority

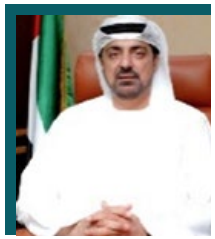
Saeed Al Tayer

Chief Executive Officer – Social Planning & Development Sector

Sponsor

The project constituted an important opportunity to acquaint with the best practices by following comprehensive methods of benchmarking comparisons locally and internationally. Our team, under the observation of the program superiors, was able to develop convenient concepts for applicable practices and methodologies in the field of employee happiness. The team was also able, within a short period, to develop practical plans to apply these methodologies in the Community Development Authority work environment. I thank those in charge of Dubai We Learn project for this opportunity, which significantly contributes to improving government work practices in Dubai.

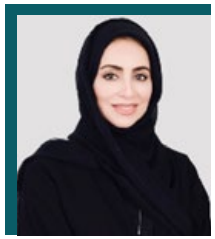
Testimonials



Khalifa Hassan Al Darrai
Chief Executive Officer

Sponsor

DCAS Moonshot project has changed the way DCAS understood and implemented innovation. We are proud to have a comprehensive framework that will shape DCAS innovation where everybody's role and contribution is defined. In a record time and because of our engagement with DWL initiative, we were able to achieve quick wins and to develop a road map to guide the way to moonshot, our innovation ecosystem to a world-class level. Thanks, and appreciation to our DCAS project team and the Dubai Excellence team for the hard work and positive attitude towards making this journey full of learning, achievements and excitement.

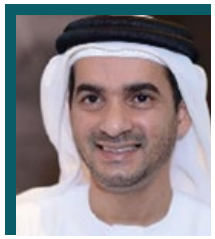


Dr. Ayesha Al Mutawa
Director of Strategy & Excellence

Team Leader

This is exactly what we want! There is learning, knowledge transformation, exposure to others, and understanding of how they get things done in a better way. It's a great initiative by DGEP. This is not only best practice exploration, but it is also the best practice in exploring best practices, and this is what makes it unique in nature. The amount of coaching, consultation, and audit resources are amazing. It keeps us motivated through opportunities for change and improvement. Our audacious DCAS project is to create a moonshot shift in the way we run innovation – from culture to systems, to behavior, to future thinking. And engagement with DWL can help us go through this safely because it is a very well-organized process. DWL itself can be a source of information for the Government of Dubai around innovations. And guess what! You have the whole database of these projects (maybe more than anyone else) recorded through TRADE Spreadsheets.

Testimonials



هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

Eng. Waleed Salman

Executive Vice President –
Business Development and Excellence

Sponsor

This project is very valuable for DEWA as we are constantly looking at ways of enhancing customer experience and reducing customer touchpoints. DEWA EV Green Charger initiative is focusing on providing the infrastructure for Dubai public to support them in switching from high emission internal combustion vehicles to zero emission electric vehicles. This will improve the air quality for the Dubai residents through reduction of carbon and other emissions in the city. The project team reflected the organization values and work ethics during the delivery of this project.

دائرة الأراضي والأملاك
Land Department

Majid Saqer Al Marri

Chief Executive Officer –
Real Estate Registration and Services

Sponsor

This initiative was guided by the principles of Dubai We Learn supervisors. The assigned DLD team members were premier experts in each relevant field as their direct supervision and strong commitment of initiative managed to achieve the short-term objectives of Smart Valuation initiative. We at DLD seek to consistently innovate for the ease of mind of investors. The new Smart Valuation initiative was launched to provide an instant, reliable, and robust property valuation service.

Testimonials

بلدية دبي
DUBAI MUNICIPALITY

Mohammed Mubarak Al Mutaiwei

Chief Executive Officer –
Support Services Sector

Sponsor

Dubai We Learn was a great initiative through which all teams achieved excellent results. I was delighted to participate in this initiative, and Dubai Municipality team was able to achieve the desired results and begin a new horizon in procurement at Dubai Municipality.

شرطة دبي
DUBAI POLICE

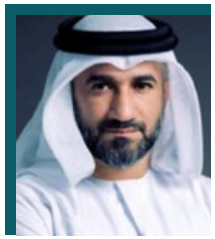
Major General Pilot.
Ahmad Mohammed Bin Thani

Assistant Commander for Seaports and Airports Affairs

Sponsor

First of all, I would like to thank the Safe Bags Benchmarking Team for their strong commitment, dedication and great contribution towards building a solid foundation for promoting, marketing and ultimately, engaging all of Dubai's Airport stakeholders in the Dubai We Learn Initiative. In fact, short term outcomes have shown very positive results in terms of stakeholder's awareness, interest and engagement exceeding set targets for the said period, creating the right momentum to meet long term objectives. Moreover, the benchmarking methodology adopted by Dubai Police and in line with best practices (TRADE) has been very effective in allowing us to ask ourselves the right questions at different stages of methodology which helped in fine-tuning the project scope to successfully achieve project aim and objectives. Finally, I'm confident and proud that this successful project and related lessons learned will be used as a reference in future benchmarking and other projects in Dubai Police.

Testimonials



مؤسسة محمد بن راشد
لتنمية المشاريع الصغيرة والمتوسطة
DUBAI SME

Abdul Baset Al Janahi

Chief Executive Officer

Sponsor

I believe that the team did a great job across the different stages of the project. Even though they had many other responsibilities, I admired their self-motivation to allocate time and work on the project. Usually, we engage consulting companies to conduct such projects. I congratulate them for finalizing the project and looking forward to see the impact on the happiness of our clients and employees next year.

مؤسسة محمد بن راشد
لتنمية المشاريع الصغيرة والمتوسطة
DUBAI SME

Essam Disi

Director of Strategy and Policy

Team Leader

Dubai We Learn, is a great initiative that helped us structure our way of approaching benchmarking projects by following the TRADE methodology. Our role in supporting entrepreneurs and innovative startups requires us to be dynamic in creating and adopting best practices in order to cater to the needs of our youth. By identifying the key areas for improvement and conducting targeted benchmarking research, we achieved great results that benefited our entrepreneurs and made our team feel proud and fulfilled after achieving the 7 stars rating. I would Like to thank DGEP, DWL, and COER teams for the great opportunity.

Testimonials

مؤسسة محمد بن راشد
لتنمية المشاريع الصغيرة والمتوسطة
DUBAI SME

Dr. Ashraf Mahate
Chief Economist – Trade and Export Market Development, Dubai Exports
Guest of Dubai SME

I attended the Knowledge Sharing Summit as a guest to support the Department of Economic Development, Dubai SME team. Dubai We Learn is a real eye-opener as it allows us to see how other Dubai Government Departments are using the TRADE Benchmarking Methodology. We are interested to see how different problems or challenges are tackled and the corresponding results. We found the session to be highly informative, especially the presentations which were packed with a lot of detail in a short space of time. We are highly inspired by the innovation and productivity improvements that can be made through benchmarking. As a direct result of the Dubai We Learn session, we are now planning to visit some of the relevant departments. In this way, we hope that our entire team will benefit from it.

GENERAL DIRECTORATE OF RESIDENCY & FOREIGNERS AFFAIRS DUBAI

Colonel
Abdul Samad Hussein Suleiman
Director of Quality and Excellence Sector
Sponsor

On behalf of the General Director of GDRFA, I would Like to thank all the Dubai We Learn team, COER, Government teams, and people who supported this venture for creativity and knowledge exchange. This was an inspired opportunity for GDRFA and the team to learn from experts and to apply creative tools helping the Cooperative Integrated System to success. Also, changing employee mindsets instead of competing, and working with each other, and I hope this initiative continues based on its added value to our institution and for Dubai.

Testimonials

هيئة الطرق والمواصلات
ROADS & TRANSPORT AUTHORITY

RTA

Nasser Abu Shehab

Chief Executive Officer – Strategy and Governance Sector

Sponsor

The team has put in a tremendous effort in managing the project and carrying its tasks and activities in line with RTA's Innovation Strategy and in accordance with the TRADE Methodology (which enhanced our capability in undertaking the project). The project will add great value to RTA's endeavors in enhancing its innovation framework and ensuring its agility in a way that exceeds the expectations of our internal and external stakeholders.

Project Teams

Project Teams

Community Development Authority

Name	Position	Project Role
Saeed Al Tayer	CEO – Social Planning & Development Sector	Sponsor
Amna Al Shamsi	HR Director	Team Leader
Eng. Ahmad Al Gharaibeh	Advisor to Director General	Benchmarking Facilitator
Hind Ahmad	HR Specialist	Administrator
Khulood Al Sharaf	Director of Marketing & Communication	Team Member
Khalid Al Ramsi	Excellence Director	Team Member

Project Teams

Dubai Corporation for Ambulance Services

Name	Position	Project Role
Khalifa Hassan Al Darrai	CEO	Sponsor
Dr. Ayesha Habeeb Al Mutawa	Director, Strategy & Org Excellence Office	Team Leader
Asma Yousuf Zainal	Strategic Projects Manager	Deputy Team Leader
Bashayer Hassan AlAli	Sr. Executive Quality and Excellence	Benchmarking Facilitator
Muayyad Ibrahim Abu Mallouh	Medical Auditor	Facilitator & Administrator
Nawal Hussain AlBalooshi	Media Officer	Team Member
Mohammed Abdulla Al Hammadi	Suggestion Scheme Administrator	Team Member
Asma Dad Muhammed	Head of Continuous Education Unit	Team Member
Majid AlZarouni	Acting Head of Airwing and Seaports Section	Team Member

Project Teams

Dubai Electricity and Water Authority

Name	Position	Project Role
Eng. Waleed Salman	EVP-BD&E	Sponsor
Eng. Majid Ali Al Hazami	Director - Smart Grid	Team Leader
Suleiman Mohammad Sabah	Specialist - Excellence	Benchmarking Facilitator
Eng. Shirin Mahmoud Mohammed	Eng. - Smart Grid	Administrator
Eng. Ahmed Suhaib Siddiqui	Dy. Sr. Mgr. – Strategic Support	Team Member
Fatma Mohammad Alalili	Dy. Mng – Corporate Excellence	Team Member
Nadia Nasser Mohd Bin Lootah	Asst. Mng. - Smart Grid	Team Member
Eng. Endika Bilbao	Sr. Researcher	Team Member
Eng. Abdullah Naji Mohsen	Engineer	Team Member
Dr. Mohamed Farhan	SM – Corporate Excellence	Team Member
Eng. Hely Cruz	Technical Architect	Team Member
Dana Akhdar	Project Promoter	Team Member

Project Teams

Dubai Health Authority

Name	Position	Project Role
H.E. Humaid Alqutami	Director General of DHA	Sponsor
Dr. Fahad Baslaib	CEO - Rashid Hospital	Team Leader
Naser Jamil	Nursing Supervisor	Benchmarking Facilitator
Sultan Al Shaibani	Senior Specialist – PMO	Administrator
Dr. Mohammad Al Redha	Director – PMO	Team Member – Core Team
Dr. Moin Fikree	Consultant – Rashid Hospital	Team Member – Core Team
Dr. Khalifa Omar	Cardiologist – Rashid Hospital	Team Member – Core Team
Dr. Wadeia Sharief	Director of Medical Education & Research Dept.	Team Member
Shireen Qaitouqa	Specialist	Team Member
Hakim Taane	Specialist – PMO	Team Member

Project Teams

Dubai Land Department

Name	Position	Project Role
Majid Saqr Al Mari	C.E.O	Sponsor
Shamsa Al Muhairi	Head of Section	Team Leader
Amal Hamza	Senior Auditor	Benchmarking Facilitator
Mohamed Al Dah	Head of Department	Administrator
Fatima Al Shamsi	Head of Section	Team Member
Noora Bawazir	Head of Section	Team Member
Yaser Mohamed	Senior Project Manager	Team Member
Ahmed Hazzah	Software Engineer	Team Member

Project Teams

Dubai Municipality

Name	Position	Project Role
Mohammed Mubarak AL Mutaiwei	Chief Executive Officer	Sponsor
Ahmed Ibrahim AL Zarouni	Manager of Special Contracts Section	Team Leader
Rahmah Khaled Al Ali	Planning & Development Specialist	Benchmarking Facilitator
Mariam Ali Murad	Senior Support Officer	Administrator
Ali Eissa Abdulrahman	Senior Tender Officer	Team Member
Taghrid AL Sayed AL Hashimi	Senior Supplier Evaluation Officer	Team Member
Shaikha Mohammed Ali	Tender Officer	Team Member

Project Teams

Dubai Police HQ

Name	Position	Project Role
Major General / Abdulla Khalifa Al-Marri	General Commander	Main Sponsor
Major General / Ahmad Mohammad Bin Thani	Assistant Commander	Sponsor
Brigadier / Ali Ateeq Bin Lahej	Director General	Deputy Sponsor
Lt. Colonel / Abdullah Faisal Al Dossari	Director of Terminal 2 Security	Team Leader
Lieutenant Colonel / Pilot Mahir Suhail Majid AlMarri	Police Air Wing Operation Head of Section	Deputy Team Leader
Captain / Ahmed Ali Abdul Rahman	Head of Department	Administrator
Captain / Eng. Omar Arif Omar Al Khaja	Head of Section	Benchmarking Facilitator
First Lieutenant / Amer Ali Al Qadri	Head of Section	Administrator
First Lieutenant/ Alia al Hajeri	Administrator	Team Member
Lieutenant / Eng. Mohamed Mahmood Zainal	Head of Section	Team Member
Lieutenant / Eng. Ahmad Al Mulla	Head of Section	Benchmarking Facilitator
Lieutenant / Rashid Abdullah Al Shehhi	Head of Section	Administrator
Sergeant / Eng. Samih Abdul Wahab Diab	Architectural Engineer	Team Member
First Constable / Hassan Yousuf Hassan	Quality Technician	Team Member

Project Teams

Dubai SME

Name	Position	Project Role
AbdulBaset Al Janahi	CEO	Sponsor
Essam Disi	Director – Strategy and Policy Department	Team Leader
Israa Anwar	Administrative Supervisor- Strategy and Policy Department	Benchmarking Facilitator
Samih Al Sharif	Specialist Quality and Excellence – Strategy and Policy Department	Benchmarking Facilitator
Zahra Al Ansari	Director – Entrepreneurs Development Department	Team Member
Halima Al Jassmi	Senior Executive – Entrepreneurs Development Department	Team Member

Project Teams

General Directorate of Residency and Foreigners Affairs

Name	Position	Project Role
Colonel Abdulsammad Hussien	Sector Director	Sponsor
Amna Saeed	Chief of Competitiveness Section	Team Leader
Hajar Alshamsi	Chief of Strategy and Excellence Section	Benchmarking Facilitator
Budoor Ibrahim	Senior Executive	Administrator
1st Lieutenant Rashid Al Rumaithi	Institutional Performance Senior Analyst	Team Member
1st Warrant Ahmed Khadeem	Chief of Process Designing Section	Team Member
Muna Al Qallaf	Excellence Performance Senior Consultant	Team Member
Eng. Elfarazdag Hassan	Innovation Senior Executive	Team Member
Mahra Al Mheiri	Strategic Planning Analytic	Team Member

Project Teams

Roads and Transport Authority

Name	Position	Project Role
Nasser Abu Shehab	CEO - Strategy and Governance Sector	Sponsor
Amair Saleem	Director - Knowledge and Innovation Dept.	Team Leader
Raunaq Dubey	Innovation Manager	Project Manager
Ahmad El Jallad	Chief Specialist- Knowledge and Innovation Dept.	SME
Mohamed Murshed	Chief Specialist- Benchmarking and Knowledge Management	Benchmarking Facilitator
Faisal Abdul Karim	Acting Manager - Idea Management	Team Member
Khaled Mohammad Saleh	Research and Studies Manager	Team Member
Eyad Al Balawneh	Senior Specialist - Research and Studies	Team Member
Muna Al Zarooni	Senior Officer - Innovation Section	Team Member

Project Teams

Dubai Government Excellence Program and Centre for Organisational Excellence Research

Name	Position	Project Role
Dr Hazza Al Neaimi	General Coordinator	Author and Contributor from DGEP
Dr Zeyad El-Kahlout	Senior Quality and Excellence Advisor	Author and Contributor from DGEP
Maha Al Suwaidi	Project Manager	Author and Contributor from DGEP
Dr. Robin Mann	Director	Author and Contributor from COER
Dr. Almas Tazein	Associate Researcher	Author and Contributor from COER
Ahmed Abbas	Senior Researcher	Author and Contributor from COER

المجلس التنفيذي
THE EXECUTIVE COUNCIL

دبي للتميز الحكومي
Dubai Government Excellence

Achieving Performance Excellence through Benchmarking and Organisational Learning 2021

10 Case Studies from the 3rd Cycle of Dubai We Learn's Excellence Makers Program

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